Faculty of Business and Economics

Master Program of Business Administration

The Influence of corporate governance on financial performance: An applied study on listed Palestinian companies in Palestine Exchange.

تأثير حوكمة الشركات على الأداء المالي: دراسة تطبيقية على الشركات الفلسطينية المدرجة في بورصة فلسطين

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# Table of Contents

**Acknowledgement** .................................................................................................................. III  
Abstract ........................................................................................................................................ VI  
Abstract (Arabic) ........................................................................................................................... VIII  
Abbreviations: .............................................................................................................................. X  
Chapter One: .................................................................................................................................. 1  
  1.1 Introduction ............................................................................................................................... 2  
  1.1.1 Research Background ......................................................................................................... 2  
  1.1.2 Study Objectives ............................................................................................................... 4  
  1.3 Problem statement ................................................................................................................... 4  
  1.4 Study Significance ................................................................................................................... 6  
  1.5 Palestine Exchange .................................................................................................................. 8  
  1.6 Corporate Governance in Palestine ...................................................................................... 10  
  1.7 Outline of the Thesis .............................................................................................................. 14  
Chapter Two: .................................................................................................................................. 16  
  2.1 Board of Directors Effectiveness ............................................................................................ 21  
  2.1.1 Board Size .......................................................................................................................... 21  
  2.1.2 Board Diligence ................................................................................................................ 24  
  2.1.3 Duality of the Board of Directors .................................................................................... 25  
  2.1.4 Gender Diversity .............................................................................................................. 27  
  2.2 Existence of audit committee ................................................................................................. 29  
  2.3 Ownership Structure ............................................................................................................. 33  
  2.3.1 Foreign Ownership ............................................................................................................ 33  
  2.3.2 Institutional Ownership ..................................................................................................... 36  
  2.3.3 Majority of Ownership ....................................................................................................... 38  
  2.4 Control variables .................................................................................................................... 39  
  2.5 Successful experiences of countries and companies in implementing governance: 41  
Chapter Three: ............................................................................................................................... 47  
  3.1 Research Methodology ........................................................................................................... 47
Abstract

This research aims to investigate the relationship between corporate governance and financial performance of listed Palestinian companies in Palestine Exchange. To investigate this relation the study adopted hypotheses to study the effects of board of directors’ effectiveness on corporate performance of companies listed on PEX. Also, it is investigate the effect of existence of audit committee on corporate performance of companies listed on PEX. Also, it is analyzed a relationship between the ownership structure and corporate performance of companies listed on PEX. In Palestine, the code of corporate governance was issued by The National Committee for Corporate Governance in 2009. The data which used in this study was collected from annual reports for 40 listed companies for the period of five years from 2013 to 2017.

In this research, many variables are used to measure corporate governance mechanism, which include (board size, Board Diligence, duality of the Board of Directors, Gender Diversity) to measure board of directors’ effectiveness, Existence of Audit Committee and (Foreign Ownership, Institutional Investors and Majority of Ownership) to measure Ownership Structure. There are two controlling variables used in this study: firms’ size and external audit quality.
The financial performance is also measured by four different methods, which divided it into two parts, accounting based measures (Return to Asset and Return to Equity), also market value measures (Tobin’s Q and Market to Book Value).

The data is analyzed to obtain quantitative measures of descriptive statistics. The descriptive, correlation and regression analysis are done in this study. The regression is based on panel data set covering 40 companies, the observations were 200 observations.

Research findings show that there is an inverse association between board of directors' size, institution ownership and firm performance; however, find positive relationship between board diligence, gender diversity, foreign ownership, majority ownership, and audit quality with company financial performance. For firm size related positively under book value models, but negatively under market value models. Also not find any significant association between BOD duality and existence of audit committee with performance, which mean AC role not effective enough.

As noted the corporate governance in Palestine developed compared with previous period but not effective change; because of it is optional not oblige companies to execution of governance code.
ويهدف هذا البحث إلى دراسة العلاقة بين حوكمة الشركات والأداء المالي للشركات الفلسطينية المدرجة في بورصة فلسطين. وعندما دراسة هذه العلاقة، اعتمدت الدراسة فرضيات لدراسة تأثير فعالية مجلس الإدارة على أداء الشركات المدرجة في بورصة فلسطين. كما أنها درست تأثير وجود لجنة التدقيق على أداء الشركات المدرجة في بورصة فلسطين. كما تم تحليل العلاقة بين هيكل الملكية وأداء الشركات المدرجة في بورصة فلسطين.

أصدرت اللجنة الوطنية لحوكمة الشركات في فلسطين مدونة حوكمة الشركات في عام 9002. حيث تم جمع البيانات المستخدمة في هذه الدراسة من التقارير السنوية لـ60 شركة مدرجة لمدة خمس سنين من 2013 إلى 2017.

في هذا البحث، تم استخدام العديد من المتغيرات لقياس آلية حوكمة الشركات، والتي تشمل (حجم المجلس، وثابرة المجلس، وازدواجية مجلس الإدارة، والتوزع بين الجنسين) لقياس فعالية مجلس الإدارة، ووجود لجنة التدقيق و (الملكية الأجنبية، الملكية المؤسسية، الملكية الأصلية) لقياس هيكل الملكية. هناك ثلاثة متغيرات تحكم مستخدمة في هذه الدراسة وهي: حجم الشركات وجودة التدقيق الخارجي.

تم قياس الأداء المالي أيضاً بأربع طرق مختلفة، تصنف إلى قسمين، مقاييس القيمة الدفترية (العائد على الأصول العائدة على حقوق الملكية)، وأيضاً مقاييس القيمة السوقية (Tobin's Q and M/BV).

تم تحليل البيانات للحصول على مقاييس كمية للإحصاءات الوصفية. تم إجراء التحليل الوصفي والارتباط والانحدار في هذه الدراسة. يركز الانحدار على مجموعة بيانات تغطي 40 شركة، وكانت الملاحظات 200 ملاحظة.
تُظهر نتائج البحث أن هناك ارتباط عكسي بين حجم مجلس الإدارة والملكية المؤسسية مع أداء الشركة، ووجدت علاقة إيجابية بين عدد اجتماعات مجلس الإدارة والتنوع بين الجنسين في المجلس، والملكية الأجنبية، وملكية الأغلبية، وجودة التدقيق الخارجي مع الأداء المالي للشركة. أما بالنسبة لحجم الشركة يرتبط بشكل إيجابي مع الأداء عند استخدام مقاييس القيمة الدفترية، ولكن بشكل سلبي عند استخدام مقاييس القيمة السوقية. كما لم يتم العثور على أي ارتباط كبير بين ازدواجية مجلس الإدارة وجودة لجنة التدقيق مع الأداء، مما يعني أن دور لجنة التدقيق ليس فعالاً بما فيه الكفاية.

كما لوحظ أن هناك تطور في مجال حوكمة الشركات في فلسطين مقارنة بالفترة السابقة ولكن ليس بالتطور الكبير، لأنه اختياري لا يلزم الشركات بتنفيذ مدونة الحوكمة.
**Keywords:** Corporate Governance, Corporate Performance, Board of Directors, Audit Committee, Ownership Structure, Firm Size, Audit Quality, Palestine Stock Exchange, Palestine.

**Abbreviations:**

PCMA = Palestine Capital Market Authority

PMA = Palestine Monetary Authority

PEX = Palestinian Exchange

BOD = Board of Director Effectiveness

AC = Audit Committee

ROA = Return on Asset

ROE = Return on Equity
Chapter One:

Introduction
Chapter One: Introduction

1.1 Research Background

Until a few years ago, the word "governance" was a strange that had no clear meaning and features, especially in developing countries. But today, this term has become most widespread words in business literature, and researchers are competing to study governance and its impact on improving corporate performance, increasing profits and enhancing the confidence of other stakeholders (Nasr M., Masri M., Awarthani H. & other, 2013).

Rouf (2014) defines corporate governance as, "a set of processes, customs, polices, laws, and institutions affecting the way a corporation (company) is directed, administered, or controlled, including the relationships among the many stakeholders involved and the goals for which the corporation is governed ".

From definition, it is clear that the role of corporate governance is to improve the company's performance in order to preserve the rights of its shareholders and to define management responsibility towards shareholders and stakeholders.

Corporate governance is very important in economy, law, administration, finance and accounting (Bebchuk&Weisbach, 2010). It is used as a monitoring tool and creates added value for the company (Saragih, Nugroho, and Eko, 2013) as a mechanism for accountability and oversight in a corporate governance system (Otman, 2014).
International researches in the field of governance has shown that companies implement good governance rules have the trust of the public and attract a greater proportion of investments in their assets than those companies that do not implement them. And according to this trust, the social responsibility of the companies rises, so achieve profit for all parties (National Governance Committee, 2009).

According to Vu & Nguyen (2017) and Darko, Aribi & Uzonwanne (2016), a good corporate governance has a positive impact on the efficiency and effectiveness of company's performance and investments, and improve competitive advantage. Moreover, it is significant to all stakeholders, including shareholders, investors, employees, creditors, managers especially CEOs, auditors, customers, the government and the local community (Otman, 2014). Also, Mollah, Al Farooque & Karim (2012) stated that corporate governance protects stakeholders including the most important part such as local and foreign shareholders. So, weak corporate governance reduces investor’s confidence and thus reduces foreign investment. Klapper & Love (2004), indicate that better corporate governance is highly correlated with better operating performance, market valuation and it is important for policymakers.

Several researches indicated that there are differences between companies regarding ownership, dividend policies, and sources of financing, but there is a common element between companies that explains this difference which is the extent of investor protection and satisfaction (Darko, Aribi & Uzonwanne, 2016;
El-Chaarani, Hani, 2014; La Porta, Lopez-de-Silanes, Shleifer & Vishny, 2000), effective corporate governance is associated with strong investor protection.

1.1 Study Objectives

The main purpose of this study is to examine the influence of corporate governance on the corporate performance of Palestinian listed companies. More specifically, the study aims to achieve the following objectives: Firstly, to examine the relationship between the board of directors’ effectiveness and corporate performance of companies listed on PEX. Secondly, to examine the relationship between the existence of audit committee and corporate performance of companies listed on PEX. Thirdly, to examine the relationship between the ownership structure and corporate performance of companies listed on PEX.

This study aims to take into consideration the largest possible number of variables that will be pooled based on previous studies, and aims to understand corporate governance in a unique political and economic environment such as Palestine.

1.3 Problem statement

Sound corporate governance structure helps attract investments, reduces risk and enhances firms’ performance. Governance practices gain more importance in a business environment characterised by high degree of political and economic
instability such as Palestine which is considered a developing country. Although the code of governance in Palestine became effective in 2009, there is only one study examined the effect of corporate governance on firms’ performance in Palestine business environment, which is Hassan, Naser & Hijazi’s study (Hassan, Naser & Hijazi’s, 2016). There has been a scarcity of studies on corporate governance practices in Palestine. Therefore, exploring the relationship between corporate governance and performance by current research is significant and helps in filling the gap in the literature in Palestine.

While the previous study (Hassan, Naser & Hijazi, 2016) covered three years from 2010 to 2012 and was confined to non-financial companies listed on (PEX), the current study covers the next period from 2013 to 2017 which is longer. This period is considered economic recovery for the Palestinian market compared to other years, despite some difficult circumstances and the constraints caused by the Israeli Occupation, such as delaying clearance funds, which constitute a high percentage of the revenues of the Palestinian National Authority; consequently it is unable to pay salaries for several months. In addition to the harassment caused by the occupation to some Palestinian companies, such as the delay of goods in the port and destroying towers of some telecommunications companies.

In addition, this research addresses all companies listed on Palestine Exchange. The current study also measures the influence of new variables (CEO duality, board gender diversity, majority of ownership and audit quality) on financial performance, which is not measured in previous study. In addition to its
contribution to filling the above mentioned gap, it provides an opportunity to compare its results with the previous study.

1.4 Study Significance

The main purpose of corporate governance is to enhance corporate performance, protect shareholders’ rights and maximize corporate market value. Therefore, this study is of great importance to examine the influence of corporate governance on the corporate performance.

Most of the previous studies have been about corporate governance and financial performance in developed countries. Compared with Palestine, which makes this study more encouraging and important to study a case in a less developed country, it is a country suffers from unstable political and economic conditions, so this study is very important to understand the effect of corporate governance on firm performance in a unique environment such as Palestine.

The governance is important for any organization in order to maximize effectiveness. Moreover, this study contributes to encouraging more research on corporate governance to raise awareness of companies on this subject and its importance. In addition, it will shift the researcher's attention to search for other factors which are not mentioned in this study that may affect the effectiveness of corporate governance, especially locally to enrich the research that studies the Palestinian environment and its companies.
This study contributes to providing further knowledge regarding corporate governance that affects investment decision makers, it helps investors to focus their attention on the most important points that the company must follow to disclose its reliability and transparency in the policies followed by the firm.

The study is important to investors and shareholders in the Palestinian companies. Owners and other stakeholders are necessary for good corporate governance by supporting managers to set regulation and policies (Huse, 2005). Adjaoud & Ben-Amar (2010) found that a company has strong corporate governance interested for shareholder rights, dividend payouts and compensations, so it increases shareholder's satisfaction. According to what's mentioned in the Palestinian corporate governance code, the company must guarantee the rights of all shareholders, including small shareholders and shareholders residing outside Palestine, and enjoying all rights. Fox (1999) emphasizes that corporate governance is necessary to protect investors.

The findings of the study are useful for shareholders and investors and play an important role for investment decisions to make their investments more valuable.

Understanding corporate governance and its importance, then implement its mechanisms help policy makers in relation to corporate governance, and how this affects and enhances the performance of corporates in Palestine.
The study is important to policy makers in the Palestinians companies listed in PEX, as it is important to policy makers relating to corporate governance to achieve economic growth.

The results of the study are also important to assess the influence of quality corporate governance on PEX performance in an instable environment such as Palestine. This information is useful for PEX to play its role as the regulator of the financial environment for companies.

This study affects the performance of managers and management decisions. Good corporate governance procedures lead to improved corporate management, and increase their efficiency, which helps to attract investments on good terms and enhances the company's competitiveness, then improve the efficiency of the firm's performance. Also, it adopts the transparency standards stipulated by corporate governance, and it helps management to avoid crises and fraud.

1.5 Palestine Exchange

PEX was established as a private company in 1995 (Hassan & Hijazi, 2015), it is the only Arab stock exchange wholly owned by the private sector. The stock exchange became a public company in 2010. It was listed for trading on April 2012 in compliance with the principles of good governance. It is aims to promoting investment in Palestine, providing a safe trading environment to serve investors and preserve their interests, developing local investments and attracting the Palestinian diaspora and foreign capital, create a professional work environment inside the stock exchange by focusing on developing human resources and update financial
markets technology, and promote relationship with local, regional and international financial institutions.

PEX seeks to be a local financial market with international standards, by providing a fair, transparent and secure trading environment. It is provides direct access to market data, historical data, reports, newsletters, and any financial information related to listed companies or market can effect on investors decisions can also be found.

Each company listed on the PEX must publish its audited annual reports within a deadline date. In addition, the company must fulfill some of the conditions stipulated by the stock exchange to list its shares in the market.

PEX has consistently encouraged listed public shareholding companies to follow the best practices of good governance to ensure integrity, transparency and fairness in its business and financial results, in order to achieve sustainable growth, raise the efficiency of the investment environment, and attract more foreign investment, thereby strengthening the Palestinian capital market.

When the Palestinian Capital Market Authority announced the "Code of Corporate Governance in Palestine", the PEX prepared a guide to its governance, desiring to be an example to be followed among the companies listed in this aspect. This guide has been prepared using the Corporate Governance Code, taking into consideration the companies law and the company's internal regulations, in addition to the founding contract and guidelines for the committees of the Board of Directors.
1.6 Corporate Governance in Palestine

The Palestinian economy is less developed than other countries because of the Israeli occupation and because it depends heavily on the Israeli economy (Abdelkarim & Ijbara, 2010).

Hassan, Naser & Hijazi (2016) explain that the domestic and foreign investment in Palestine has improved compared to the past, because of the development of the Palestinian economy, improvement of security and economic conditions, in addition to the donors support and grants.

Improved security and economic conditions, together with the support of international donors, resulted in significant progress in the Palestinian economy, and Palestine became an attractive destination for private, domestic and foreign investments.

The Palestinian Investment Promotion Law when compared with similar regimes in the region and the world shows to be very competitive. A new investment founded can benefit up to 100% exemption on income taxes like agricultural projects. In addition, there are incentive discounts on tourism and industrial sector projects and others, (as mentioned in the Palestinian Investment Promotion Law, 2014)
In Palestine, the governance structure falls mainly under the jurisdiction of Palestine Capital Market Authority (PCMA) in 2009, has developed its own governance code applies to all public shareholding companies listed or not listed on Palestine Exchange (PEX).

PCMAs' code of corporate governance adopted in this study aims at achieving transparency and accountability, ensuring the rights of shareholders and stakeholders, the quality of financial reporting, and achieving effective corporate performance to drive the country's economic development forward (As a mentioned in the Code of Corporate Governance in Palestine issued by National Committee for Corporate Governance, 2009).

The code of corporate governance issued by National Committee for Corporate Governance in 2009 was guided by the principles of corporate governance issued by the Organization for Economic Cooperation and Development (OECD), as well as other corporate governance codes developed at the international and regional levels.

The Corporate Code is a guide for companies in managing their business by establishing rules of transparency, fairness and providing the public interest on the personal interest between management, shareholders, workers and related parties for a raising efficiency in the work and achieving profit and sustainable growth.

The Code defines corporate governance as a set of rules and procedures that help in managing and controlling the company, by organizing relationships between the board of directors, executive management, shareholders, and other stakeholders, as
well as the company's social and environmental responsibility. It is based on the laws and regulations in Palestine.

This code consists of three types of rules (Code, 2009):

The first type: It is the rules that are based on explicit legislative texts, and their application is mandatory by companies. These rules have been written by specific words, such as: must, may not be, right, obligated, and prohibited.

The second type: It is the rules that are consistent with international practices in the field of corporate governance; do not conflict with any explicit legislative text; and their application is voluntary by companies. These rules have been written by specific words, such as: favors, advises, and may.

The third type: It is the rules that are consistent with international practices in the field of corporate governance, but are inconsistent with explicit legislative texts; it was recommended that the existing legislation should be modified to suit these practices and rules.

Code of corporate governance show that the company must be managed by board of directors their number consists between five and eleven members. It is not permissible for the chairman and members of the board of directors to participate in the management of a similar or competing company of their company, or to perform competing work. The Chairman of the Board of Directors or one of its members may not have a direct or indirect interest in contracts and projects concluded with the company
As mention in code, it is preferable that the Chairman of the Board or any member there in not exercise executive duties in the company, in order to maintain independence and distribute powers and responsibilities instead of focusing them in the hands of one person, as well as for accounting and accountability purposes, as it is not possible for the Chairman of the Council to hold himself accountable.

It is recommended that the Board of Directors form the following committees: The Audit Committee, Rewards Committee and Governance Committee. The first committee is to ensure the transparency of the company's accounts and inform shareholders and other stakeholders of the size of the risks facing the company. The second committee assists the Board of Directors in setting the rewards policy for members of the Board of Directors and senior officials, taking into account the size of their performance and balancing their interests on the one hand, and the interests of the company and shareholders on the other hand. The third committee guides the process of applying the rules of governance, the code advised that this committee prepare a corporate governance manual to be approved by the Board of Directors.

It is preferable for the board to meet a number of times Proportional to the size of the company's work, and in line with the company's internal system to ensure the board closely follows up the company's business.

The Corporate Governance Code applies to public shareholding companies and financial institutions that fall under the supervision and controlling of the Capital Market Authority. The Authority monitors the compliance of companies with the
provisions of this code; it is developing incentives for companies implement governance rules.

The National Committee for Corporate Governance interpret any of the provisions of this code when necessary, and review it from time to time, adjusted it, or add to it if necessary.

1.7 Outline of the Thesis

The study would consist of five chapters:

Chapter 1 provides an introduction of the research background, the study objectives, study significant and added value for investors, policymakers, management and researchers, also presented problem statement, Palestine exchange, corporate governance in Palestine, and the research outline.

Chapter 2 presents an overview of the literature review and hypothesis, talk about performance, board of directors effectiveness (board size, board diligence, duality of BOD, gender diversity), existence of audit committee, ownership structure (foreign ownership, institutional ownership, majority of ownership) and controlling variables (firms size, audit quality), also this chapter talk about successful experiences of countries and companies in implementing governance.
Chapter 3 provides details about how the study would be conducted and methodology of research; this chapter presents research approach, resources and method of data collection, variables of the study.

Chapter 4 presents the data analysis and discussion of our empirical findings, in this section descriptive analysis, correlation analysis and regression analysis are conducted, and found the research result.

Chapter 5 this final chapter concludes the findings of the thesis and research limitations as well as makes suggestions for future study.
Chapter Two:

Literatures Review & Hypotheses
Chapter Two: Literature Review & Hypotheses

Previous literatures investigate the relationship between corporate performance and various corporate governance mechanisms around the world in various policies, cultures, and the political and economic environment. This section is reviewing a summary of the some results of previous studies.

Performance evaluation is the important indicator to take decisions related to a company. It is important for investors, managers and creditors. Financial performance is overall actual firms' profits or losses over a specific period, it is measuring the results of a firm financial transactions, operations and policies as a monetary value (Rai, 2019).

Financial ratios provide a simple description about the firm's financial performance and provide better understanding of a firm's performance; it helps managements and analysts to compare the current result to previous periods' results, it helps to compare the current result to objectives of the firm to identify if the current performance is different from the goals or not, and it helps to predict the company's future performance. Also, it provides analysis between financial statements factors, these ratios such as liquidity and profitability reflect firms' operation and policies as a monetary value (Nathwani, 2004). Understanding firms' performance for previous years gives important suggestions for enhancing future performance.
Financial Performance Analysis determines the current position, reflects the financial stability of a firm and helps in planning for future decisions and polices. It helps firm to utilize financial resources to generate profits, then to achieve growth.

As mentioned above, financial performance evaluation is important for many parties; shareholders, investors, managers, creditors and other stakeholders. Performance indicators affect shareholders decisions by buying or selling stocks based on performance, because they invested their money in a specific firm and interested for current and expected performance to know their profits and dividends. The Investors always look for the profitable company to invest their money, as well as stability of these profits. Financial performance analysis helps investors to compare a company performance to competitors companies in market.

Firm performance reflects management effectiveness, and they are responsible for their decisions. It plays a role to encourage managers to exploit the company's available resources to achieve the maximum level of profits; because profits reflect managers’ skill and intelligence in utilize these resources.

Creditors are considered the liquidity providers of the company, they interested for the stability of company financial condition. So, the performance of a company is important for them for making decision on whether to lend it or not.
Companies that have better financial performance have better ability to resist any problems from the internal or external environment and it is able to contribute to the stability of a country’s financial system as a whole (Murerwa, 2015).

As mentioned in literature reviews, the company's profitability and value were considered as measures of its performance (Otman, 2014). Corporate performance can be measured by two approaches; accounting-based (book value based) and market-based measurements (Agarwal & Taffler, 2008). While the book value measurements include common methods to measure firm performance such as return on asset (ROA) and return on equity (ROE) (Alabdullah, 2016; Bin Tariq & Butt, 2008), the market–based measurements also include many methods to measure firm performance like Tobin’s Q and Market to Book Value (M/BV) (Ficici & Aybar, 2012; Horváth & Spirollari, 2012).

Return on assets and return on equity is profitability ratios reflect company's financial performance (Twairesh, 2014). The return on assets (ROA) is reflecting the ratio of net income to total asset of the firm. The return on equity (ROE) is reflecting the ratio of net income to total equity of the firm, the higher percentage; the more efficient a company's management to generate profits (Investopedia, 2019; Brealey, Myers, Allen & Mohanty, 2012; San & Heng, 2011 and Zutter & Gitman, 2011).

Tobin’s Q and Market to Book Value measure the value of firms. Tobin’s Q is widely used as a market-based measurement in the finance literature, it calculates market value for a company performance (Vu & Nguyen, 2017; Ficici & Aybar
Market to Book Value (M/BV) ratio evaluates a market value of a company relative to its book value, it predicts the ability of a company to achieve future profits (Hassan, Naser & Hijazi, 2016; Bin Tariq & Butt, 2008).

In chapter three will explain the methods that measures firm performance in detail and that will be used in this research.

According to previous studies, the performance of companies is affected by a set of factors that were discussed in the Code of Governance. The result of studies varied in terms of the direction of the relationship, positive or negative, and in terms of the strength of the relationship, whether it's significant or insignificant.

This research study effect of some factors on corporate performance and these factors are: Board of Directors Effectiveness, Existence of audit committee and Ownership Structure. And will study effect of control variables (firm size and quality of external auditors) on corporate performance.

This section review the results of some studies that have examined the effect of these factors on performance
2.1 Board of Directors Effectiveness

Board of Directors plays an important role in the company's success; the professional managers control the key decisions of the corporation (John & Senbet, 1998). Also, it is plays a monitoring role on behalf of the shareholders and owners of the company. Managers is make investment and production decisions, put company polices and utilizing resources efficiently to maximize the wealth of owners.

Board of Directors Effectiveness is influenced by a combination of factors such as Board Size, Board Diligence, duality of the Board of Directors, Gender Diversity and other factors, will review them below.

2.1.1 Board Size

The board of directors is responsible for establishing policies and setting strategic objectives that govern the organization and oversee the activities of an organization. Corporate boards have the power to make investment policy, decisions about management compensation policy and all important decisions (Bhagat & Bolton, 2008). However, the effectiveness of the board of directors depends on the quantity and quality of information that they have (Bebchuk & Weisbach, 2010).

Corporate governance is concerned in the manner in which the company is managed and controlled. Corporate governance examines the BOD's abilities to set policies
and goals for the company. It is interested in the interests of stockholders and other stakeholders (Governance code, 2009).

There is an ongoing debate among researchers about the ideal number of board members. Anderson, Mansi & Reeb (2004) indicate that a high number of directors on the board increases board expertise and quality, enhances monitoring and makes it better, and improves the performance and operation. So, the experience of board members is very important to increase trust in the board’s work. Alabdullah (2016) studied non-financial companies in the Jordanian market and showed that a larger board size has a positive impact on firm’s performance with regard to the measurements: ROA and ROE measurements.

On the other hand, other studies show that a large number of board members lead to difficulties in decision making process, weaknesses in communication, rise of cost, which leads to a decrease of the company’s performance (Belkhir, 2009).

According to Vu & Nguyen (2017) the BOD affects the owners’ business interests, so it is the most important variable in corporate governance. They also found that the optimal BOD number of members is around seven to eight members. They argued that greater number of members leads to a greater negative effect and it becomes less effective when communication and decision making of managerial performance. Furthermore, small BOD makes communication and coordination among members easier, thus achieving correct decisions and better performance. While Otman (2014) suggests that the ideal number of BOD members is between seven to nine members. It is argued that some criteria must be taken into
consideration first before appointing the BOD, such as company size and needs, regulatory and skills requirements, and company operations.

Bai (2013) investigated the effect of board size on hospital performance and found negative effects. The study explained that if the number of board members increased, its efficiency decreases. The researcher also emphasizes that the board plays an important role in all important decisions of the company in addition to its role in corporate governance. The Board is authorized by the shareholders to improve the performance of the company.

Azeez (2015), investigated the relationship between board size and firm performance of the listed companies in Sri Lanka, and suggested that the smaller the number of board members is, the higher results of firm performance are, thus there is a negative correlation between board size and performance.

But other studies show an insignificant relationship between board size and firm performance (Darko, Aribi & Uzonwanne, 2016). Horváth & Spirollari (2012) have not found any effect of board size represented by the number of its members on board effectiveness nor firm’s performance.

Mangena & Tauringana (2006) found that board size is not important. There is no significant relationship between size of the board and the decision process of the BOD and performance.
It is, therefore, hypothesized that:

Hypothesis 1: There is a negative relationship between the board of directors’ size and corporate performance of companies listed on PEX.

2.1.2 Board Diligence

In addition to the board size, board diligence in terms of board meetings, plays an important role with communication between directors in obtaining suitable information on financial and operating conditions of the company. Previous literature has documented a relationship between board meetings and company performance. The active BOD contributes to enhancing its role in controlling the company and controlling on the reporting process particularly (Yatim, Kent & Clarkson, 2006). Additionally, many studies show that board frequent meetings improve board performance and increase their effectiveness which lead to a noticeable increase of financial performance (Garcia Lara, Osma, & Penalva, 2007). Hashim & Abdul Rahman (2011) examine the association between board diligence, which is one of corporate governance mechanism, with board efficiency and effectiveness, then they clarify the effect this has on all company performance. This study argues that a higher number of board meetings in a year enhances board role in the issuance of audited financial reports, increases quality of information and eventually leads to the rationality of the decision making process done by investors and stakeholders. The diversity of the skills and experience of the board members also play important role. Yatim, Kent & Clarkson (2006) show strong
positive association between the frequency of board meetings and board effectiveness.

On the contrary, according to Johl, Kaur, and Cooper (2015), high frequency of board meetings decreases productivity. Therefore, the company should hold less frequent meetings to utilize time in more meaningful ways that enhance board performance. Also, Hassan, Naser & Hijazi (2016), found a significant negative association with the frequency of the board of directors meetings and firm performance.

Horváth & Spirollari (2012) have not found any effect of the frequency of board meetings on board effectiveness on firm performance.

It is, therefore, hypothesized that:

Hypothesis 2: There is a negative relationship between the board of directors’ diligence and corporate performance of companies listed on PEX.

2.1.3 Duality of the Board of Directors

The duality of positions between the board of directors and the executives creates problems in authority. The Code of Corporate Governance in Palestine clarified that it is not desirable that the President of the BOD or any member of the Board to exercise executive functions in the Company in order to preserve the independence and the distribution of powers and responsibilities, instead of collecting them in the hands of one person, as well as for the purposes of accountability since the person cannot hold himself accountable. The independence of the board of directors
ensures the reliability and credibility of decisions. Anum Mohd Ghazali (2010) found a negative relationship between duality of board of directors and corporate performance. In addition, Cheema & Din (2013); Aksu & Tansel Cetin (2010) shows the same result on this subject. El-Chaarani (2014) found a positive relationship between BOD independence and performance when it studied Lebanese banks, the author argued that” the independent directors are more professional in decision making and can more easily achieve the supervision function, thus reducing the possibility of collusion of top executives and improving the operating performance of the firm.

Azeez (2015) investigates the relationship between board independent and performance and suggests that the separation of tasks between board member and executive positively associated with firm performance, and argued that nonexecutive directors are positively influenced with improving company performance.

Independent directors are interested to know more information to monitor and cooperate with the internal and external auditors to enhance overall shareholders’ protection process. Hence enhance performance, and they are less subject to the conflicts of interest that affect the judgments and decisions (Desender, Aguilera, Lópezpuertas-Lamy & Crespi, 2016).

The duality between BOD and executive roles reduces the boards’ attention to monitoring, which leads to a reduction of importance on shareholder value, (Tuggle, Sirmon, Reutzel, & Bierman, 2010).
But Vu & Nguyen (2017) have shown no relationship of board independence and firm performance. Hashim & Abdul Rahman (2011) also has not found any association between duality board and performance efficiency, the independence of board is not affected by timeliness of audited reports.

From another point of view, Horváth & Spirollari (2012) found that independent directors decrease corporate performance, and argued that monitoring efficiency may decrease; also independent directors may prefer conservative business strategies. Darko, Aribi & Uzonwanne (2016) discuss the same issue and showed that non-executive directors do not help performance, so a negative relationship between board independence and corporate performance.

It is, therefore, hypothesized that:

Hypothesis 3: There is a negative relationship between the duality of the board of directors and corporate performance of companies listed on PEX.

2.1.4 Gender Diversity

The presence of women in the board of directors has an important role in increasing accountability and transparency. The influence of gender diversity on boards of directors has become an interesting topic in recent years. Board of directors that includes females ensures effective communication between the board of directors and stakeholders, more interest in social responsibility, customer and employee satisfaction and innovation performance all increase (Terjesen, Sealy & Singh, 2009).
Ararat, Aksu & Tansel Cetin (2010) analyzed the performance of firms traded in the Istanbul Stock Exchange (ISE) and investigated the impact of board diversity on the financial performance; they found that gender diversity in board became more effective in monitoring hence enhancing firm performance.

Other study suggests that the number of female directors on the board has increased profitability and has had a positive effect on performance (Darko, Aribi & Uzonwanne, 2016). "Board membership remains a significant issue in the struggle for more equitable leadership" (Rhode & Packel, 2014), also indicated that the importance of board diversity on board decision making and governance to improve corporate financial performance, and explained that in America, the Women's Leadership Fund was created for investment in listed US companies, who had women playing important roles, such as board members.

Carter, D'Souza, Simkins & Simpson (2008) found a positive association between the percentage of female directors on the board and performance through board functions they have investigated: audit, executive compensation, and director nomination, then argued that female play important role in corporate governance to enhance performance and create value for shareholders. Adams & Ferreira (2009) note that female directors behave differently than male directors, male directors are less likely to be absent from meetings than female directors, but female directors have a substantial impact on board structure. Also, they have an effect on the effectiveness of performance of the Board of Directors.

It is, therefore, hypothesized that:

Hypothesis 4: There is a positive relationship between the gender diversity of the board of directors and corporate performance of companies listed on PEX.

2.2 Existence of audit committee

Existence of audit committee is optional in Palestinian companies. It is established by the Board of directors and delegates to audit committee (AC) some of its oversight functions, including ensuring the implementation of the company's procedures, policies and workflow to improve its performance, control of financial system thus reducing financial fraud, internal control of risk management and facilitate and monitor external audit work (DeZoort, Hermanson, Archambeault & Reed, 2002; Klein, 1998).

The audit committee is considered one of the important governance mechanisms; it is work for the benefit of owners and increases transparency between them and company management. AC is very important especially in large companies; large companies are more successful in forming governance including audit committee to increase investors’ confidence (Hassan & Hijazi, 2015). Audit committee plays an important role in corporate governance, and enhances firm performance; according to Fearnley & Beattie (2004) the AC facilitates the transfer of
information between related parties including management, BOD, shareholders and the external auditor.

Several Palestinian studies indicated that the audit committee is optional in Palestine (Hassan, Hijazi & Naser, 2017; Hassan, Naser & Hijazi, 2016; Abdelkarim & Ijbara, 2010). While in the USA for example AC was optional before Sarbanes-Oxley, but it became mandatory after this event for listed companies on the stock exchange (Abdelkarim & Ijbara, 2010). And another example of Malaysia which is considered a model in accounting and financial terms, audit committee has been mandatory since 1993 (Yatim, Kent & Clarkson, 2006), this study emphasized the importance of the role played by the audit committee in protects the reliability of the accounting and financial process, reducing embezzlement and financial theft, this is due to a significant improvement in performance.

AC also plays an important role in monitoring, and increasing the quality of performance, Turley & Zaman (2004) explained that the primary goal of forming the audit committee is to improve performance through improving the performance of the management, board of directors and employees.

Independence and financial expertise are key and important issues for an audit committee. Hassan & Hijazi (2015) explain in their study that effectiveness of the audit committee (AC) is measured by AC size, AC independence, the financial expertise of the committee members and committee diligence. So, if members of audit committees have high accounting and financial expertise, they enhance the effectiveness of the audit committee (Yatim, Kent & Clarkson, 2006), especially
expertise in audit field, this allows for a better understanding of audit procedures and auditing issues and risks, hence reduces issues of fraud and corruption. The independence in both internal and external audit is important, where the Sarbanes–Oxley Act of 2002 increased independence requirements of audit committees, after many failures and financial scandals which occurred in many countries. (Hassan & Hijazi, 2015; Zheng, 2008; Yatim, Kent & Clarkson, 2006) found a positive relationship between the existence of an audit committee and performance of companies. Audit committee working as monitoring mechanism (Hassan, 2016), companies need monitoring to comparing between goals and achievements in order to correct mistakes, manage crises and improve performance. Tornyeva & Wereko (2012) investigate the effect of corporate governance on performance and used audit committee as mechanism, they found a significant positive effect and clarified that AC play a good and essential role for enhance performance and protect investors. Similarly, Otman (2014) found significant positive relationship between audit committee and performance by used ROA, ROE & Tobin's Q, he focused that independence of the AC increases consistency and transparency of information; this is reflected in the improved financial performance of the company.

Hassan, Hijazi & Naser (2017) examine the role of audit committee (AC) as a corporate governance mechanism in United Arab of Emirates, they noted that independent and experienced members provide modern procedures that enhance the role of the audit committee and make it effective to fulfill its role in improving
performance. They indicated there is an integrative relationship with the independence and size of the BOD, which is also governance mechanism. So, the success of the audit committee in its work affects the effectiveness of the board and consequently improves the financial position of the company as a whole.

On other hand (Hassan, Naser & Hijazi, 2016) analyzed the effect of AC existence on Palestinian companies performance and found a negative influence of it on performance, they attributed this negative impact to the lack of experience and financial competence of the audit committee members .

Aldamen, Duncan, Kelly, McNamara & Nagel (2012) study the influence of AC on performance during crisis period and found that it negatively related with firms' accounting performance especially when chair of AC serving longer period; because of he become less independent.

Turley & Zaman (2004) found no effect of AC on enhancing performance; they did not reach a conclusive and limited result but left a wide scope for research. Also, there are researchers in Arab and Foreign countries, who studied the impact of the audit committee on performance and not found any significant association (Ghabayen, 2012; Kajola, 2008).
Therefore, the following hypothesis is proposed:

Hypothesis 5: There is a positive relationship between the existence of audit committee and corporate performance of companies listed on PEX.

2.3 Ownership Structure

One of the differences between corporate governance systems is the difference in company ownership structure. Many previous literatures pay attention to the effect of ownership structure on firms’ performance. The findings of previous studies which tested the influence of ownership structure on financial performance have produced mixed results.

In Palestinian listed firms the ownership may be foreign or institutional shareholders (Hassan & Hijazi, 2015). Institutional shareholders in general take public or private forms (Spigelman, 2010).

Mollah, Al Farooque & Karim (2012) analyzed the effect of corporate governance mechanisms on corporate performance and provided numerical evidence, which emphasizes that higher foreign and institutional ownership enhance monitoring of the listed firms and eventually improve firm value.

2.3.1 Foreign Ownership

The previous studies have indicated that foreign ownership in the company indicates the confidence of foreign investors in the company and better disclosure of information and thus higher valuation in the market (AnumMohdGhazali, 2010; and Bebchuk, Weisbach, 2010). The study also indicates that foreign ownership
provides better qualification and skills than local ownership which seen on a firms performance. Mangena & Tauringana (2006) found that foreign investors prefer large, good cash position and profitable companies.

Aydin, Sayim & Yalama (2007) the study showed that the performance of companies with foreign ownership is better than companies with full local ownership when analysing companies listed in Istanbul Stock Exchange (ISE), and this is due to the higher ability to control and monitor, lower operational costs that resulted from adoption of new technology. It also indicated that foreign investment plays an important role for decision making, developing and economic growth.

Akimova and Schwödiauer (2004) found significant effect of foreign ownership on performance of a manager from a perspective that foreign investors provide new technology and financial capital.

Cole, Elliott & Strobl (2008) found foreign ownership has provided new technology, foreign expertise and training, but must utilize these skills to transfer it to human resources to dedicate this new technology to improve performance and develop the economy.

Dahlquist & Robertsson (2001) assessed foreign ownership in Swedish companies and found that foreign investors prefer large firms that pay low dividends and firms with large cash positions.
Desender, Aguilera, Lópezpuertas-Lamy & Crespi (2016) analyzed Japanese listed corporations and argued that foreign ownership promote directors to protect shareholders’ interests by monitoring, and applying corporate governance practices to protect their investment.

Mangena & Tauringana (2006) suggest that foreign ownership encourages companies to have greater disclosure and effective corporate governance structures, so it is positively and significantly associated with company’s performance.

Sometimes foreign ownership may negatively affect the company's performance, especially in terms of costs, may be forcing the company to pay more dividends. Kang & Kim, (2010) found negative effect for foreign ownership on performance. This relation explained by that foreign investors are less familiar with the host country than domestic investors.


Other study not found any significant relation between foreign ownership and performance (Hassan, Naser & Hijazi, 2016).
Therefore, the following hypothesis is proposed:

Hypothesis 6: There is a negative relationship between the foreign ownership and corporate performance of companies listed on PEX.

2.3.2 Institutional Ownership

Institutional ownership has become widespread in financial markets in many countries (Gillan& Starks, 2003), and it confirms that it is strengthening oversight on executives, because of the institutional ownership has the incentive to monitor management at low cost. Tuggle, Sirmon, Reutzel & Bierman (2010) found the same result with the data they have analysed and stated that they are important in corporate governance, thus in improving performance. On the other hand, McCahery, Sautner & Starks (2016) argued that institutional investors face problems in legal aspect and liquidity, while the management suffers from the risk and threatens of the exit institutional investors. Gillan & Starks (2003) argued that "increased investment by foreign institutions may provide those institutions with the power to enforce governance changes".

Hassan, Naser & Hijazi (2016) found significant negative association with the percentage of institutional investors and firm performance.

Bhojraj & Sengupta (2003) stated that institutional owner’s emphasize on management role to take stricter monitoring actions and regulatory supervisory function to protect shareholders’ interests; because large stockholdings have greater benefits and have greater voting power to take profitable corrective action.
Desender, Aguilera, Lópezpuertas-Lamy & Crespi (2016) found that institution investors play an important role in enhancing board oversight and found a correlation between the executive compensation and company's performance. Institutional owners have higher proportion investment, so their incentives are to monitor managers, and they are considered market makers (Mangena & Tauringana, 2006).

Neubaum & Zahra (2006) divided institutional ownership into two types depending on the period of ownership, long term and short term, and the result suggests that long term institutional ownership is positively associated with the level and activity of the company, but the short term institution ownership is negatively associated.

Seifert, Gonenc & Wright (2005) argued that there are no consistent nor clear relationships between institutional ownership on performance across the four countries, because the study investigate the relationship across differently countries, the U.S., Germany, the U.K., and Japan, each one has specific local laws and governance practices.

Wong (2016) investigated corporate governance for Chinese listed firms, and argued that although institutional and governance mechanisms are not dominant factors in China, they play an important role during particular stages in the life cycle of the firms and in certain industries or in the developed economies.

Rajgopal, Venkatachalam & Jiambalvo (1999) show that institutional owners have more information than individual investors and are less likely to be fooled by
earnings reported by management although institutional investors are interested in short term earnings compared to individual investors in assessing firm value. Therefore, the following hypothesis is proposed:

Hypothesis 7: There is a negative relationship between the institutional ownership and corporate performance of companies listed on PEX.

2.3.3 Majority of Ownership

Some studies found that there is a negative relationship between the majority of ownership and the company's performance. The majority ownership has control over the company, so the priority of their interests is more important than the interest of the minority and the company, which negatively affects the company's performance. Dwumah (2017) found that countries did not have a system focused on protecting the rights of investors, especially the minority who had a problem which is that big investors were focused more on their own interests rather than the interests of the company and the interests of the minority.

Strong implementation of corporate governance enhances the ability of the firm to protect the minority shareholders’ rights (Otman, 2014; Dwumah, 2017). As mentioned in Ongore & Obonyo (2011), the minatory shareholders may not have power to enforce their interest and monitor management compared to the majority because they cannot change the ownership structure.

Khamis, Hamdan & Elali (2015) found that the companies that have high majority ownership have better performance and more growth rate. Moreover, they have higher institutional and foreign ownership. Darko, Aribi & Uzonwanne (2016)
suggest that ownership concentration in companies, decreases agency problems, hence enhances performance. In other words, large shareholders are more interested to increase market value. According to the Palestinian Corporate Governance Code, small investors holding of the company's shares are entitled to elect their representatives on the board of directors. This strengthens the protection of the rights of the minority and does not neglect the code for them.

Therefore, the following hypothesis is proposed:

Hypothesis 8: There is a negative relationship between the majority ownership and corporate performance of companies listed on PEX.

2.4 Control variables

From the prior literature, the company characteristics that are expected to influence the company performance include firms size (El-Chaarani, 2014; Bai, 2013; Ararat, Aksu & Tansel Cetin, 2010; and Desender, Aguilera, Lópezpuertas-Lamy & Crespi, 2016), is measured by the natural logarithm of total asset (El-Chaarani, 2014; Ararat, Aksu&Tansel Cetin, 2010; Yatim, Kent & Clarkson, 2006) and audit quality ( Desender, Aguilera, Lópezpuertas-Lamy & Crespi, 2016). Audit quality measures as if the client firm is working with one of the "Big 4" auditing firms, (KPMG), (Deloitte), (PwC), and (Ernst & Young) (Mangena & Tauringana, 2006).
Fan & Wong (2005) suggests that "Big 4" auditors play role in corporate governance role.

Alabdullah (2016) used firm size as a control variable and found that firm size has no effect on firm performance. As mentioned in Cole, Elliott & Strobl (2008) assured that the size of the company is negatively associated with its production capacity.

The result of Ararat, Aksu & Tansel Cetin (2010) found that firm size is positively related, but the opposite is true for market performance. Azeez (2015) used the firm size as control variables, and the results indicate that firm size has positive effect on firm performance.

Neubaum& Zahra (2006) investigated company size as a control variables and found the company size is positive and significantly correlated with performance, Hassan, Naser & Hijazi (2016) concluded that a positive relationship exists between firm size and its performance, then explained that large size of Palestinian firms use new technology and developed production techniques.

Therefore, the following hypothesis is proposed:

Hypothesis 9: There is a positive relationship between the firm size, external auditors and corporate performance of companies listed on PEX.
2.5 Successful experiences of countries and companies in implementing governance:

Although ignoring the importance of applying governance to many companies, everyone agrees that governance forms the basis for economic development, and this reinforced the existence of successful global experiences in the application of governance.

Austrian companies, for example, are ranked first globally in the scope of governance. In Austria, there is wide acceptance of the corporate governance law. Commitment and transparency are part of Austria's modern corporate culture, and voluntary is considered the key to success. Although there are a few Austrian companies that do not implement good corporate governance and high transparency, at 100 per cent, most stand behind the provisions of the Corporate Governance Act.

Corporate governance in Germany is also distinguished by several unique advantages. One of the most important conditions required by the law of the German financial institution is that the board of directors is divided into two levels: the first is a board of directors responsible for the company's management, the second is an oversight body concerned with overseeing the activities of the board of directors. The members of the supervisory board of large companies (500 employees) are elected by the shareholders and employees of the company. There are leading companies and organizations with successful experiences in implementing governance.
For example, GB Morgan Bank practices the governance policy through a diverse, fully independent, and qualified board of directors performs its functions as a governing body in the name of shareholders. The Board's work is supported by a set of rules that reflect the standards of the New York City stock market, where independence is the most important and the first of those rules. The board is elected by the chief independent executives of the administration. The Board oversees and evaluates internal operations, risk management and financial reporting. Also, the companies "Nestle" and "Bayer" are considered a role model in the matter of governance, as they are the only companies that scored 100 out of 100 in disclosures and transparency.

The source: Arab Economic International Newspaper.

2.6 Conceptual Framework

A conceptual framework is a graphical representation nature of the interrelationships of the study variables (Wamiori, 2019).

According to literature reviews, there are two views regarding the relationship between performance and corporate governance, this is called endogeneity in the corporate governance–performance (Wintoki, Linck & Netter, 2012), the first aspect state that corporate governance enhance performance and increase company growth, the other aspect state is that big firm has high performance level which applied corporate governance mechanisms, and more successful in apply corporate
governance mechanism, and the results will vary according to which view will adopt (Schultz, Tan & Walsh, 2010), this study will adopt the first aspect.

Many researchers found the positive impact of governance on performance, but did not provide consistent or conclusive evidence, because of differences in the models or analysis procedures used.

Wintoki, Linck & Netter (2012), assert three endogeneity sources, Dynamic endogeneity, Simultaneity and Unobserved heterogeneity. Dynamic endogeneity occurs when the company's past performance is used to define the new corporate governance structure, so when the company suffers from a previous poor performance, a strict corporate governance structure is put in place, which affects performance. Simultaneity occurs when the firm determines governance structure simultaneity with the expected firm's performance. Unobserved heterogeneity, there may be unobserved factor influences on performance, which is difficult to measure. In the governance–performance relation governance structure, and performance may be affected by unobserved characteristics for the company which have fixed effects. For example, the personality and ability of the CEO in crisis management may influence on the company's performance.

Presence one source of endogeneity leads to false, biased, and ineffective results (Schultz, Tan & Walsh, 2010).

Pham, Suchard & Zein (2011) analyzes the relationship between firm performance and corporate governance in Australia and their result suffered from endogeneity
biases that arise in the governance–performance relation, it is shown that there is no significant correlation between all governance variables and performance. The failure to consideration dynamic endogeneity leads to false and biased relationships between performance measures and governance characteristics (Wintoki, Linck & Netter, 2012; Pham, Suchard & Zein, 2011).

After taking into account dynamic endogeneity, simultaneity, and unobserved heterogeneity, the results are be more realistic and reliable in governance – performance relation (Nguyen, Locke & Reddy, 2015).

Abed, Al-Attar & Suwaidan (2012) studied the relation between governance and earnings in Jordan and found that the size of the firm is not related to performance and doesn't affect developing performance. Siregar & Utama (2008) also found the same insignificant evidence. Mishra & Nielsen (2000) control potential endogeneity issues by the use of a two-stage least squares approach and control sample to avoid selection bias.

Most of researchers study the effect of corporate governance mechanisms on enhancing performance, but other researchers have different perspective which say the big firms have the power and capacity to achieve corporate governance mechanism more successfully (Azeez, 2015; Pervan & Višić , 2012; Ararat, Aksu & Tansel Cetin, 2010; Neubaum& Zahra, 2006).

Pervan & Višić (2012) focused their analysis on the influence of firm size on firm profitability, and indicated that the big firm which has high performance
(accounting profit and market value) influences on other variables such as ownership structure and BOD effectiveness that consider governance mechanisms. Large companies seek to have efficient BOD members to maximize profits, also it is interested by existent audit committee to control company internal environment. The analysis result revealed that the firm size has a significant positive influence on firm profitability, thus it applies features of governance code successfully. Vijayakumar and Tamizhselvan (2010) also found a positive correlation between firm size and profitability. Sritharan (2015) states that the large firms are able to be more effective especially in governance aspect, also they have economic power and market control, and can exploit and take advantage scale of economies. In his study, he found a positive relation between firm size and performance then governance.

Three categories of independent variables are used in this research as shown in Figure 2.1 (Framework structure). The first category of independent variables is Effectiveness of Board of Directors, which includes board of director's size, board of director's meeting, female percentage from board of directors and duality of board of directors. The second category of independent variables is Existence of Audit Committee. The third category of independent variables is Ownership Structure, which includes Foreign Ownership, Institutional Ownership and Majority of Ownership. Two controlling variables used in this study and it's shown in Figure 2.1, firms’ size and audit quality.
Figure 2.1 (Framework structure)

Effectives of BOD
- BOD' size
- BOD' Diligence
- Gender Diversity
- BOD’ duality

Dependent Variable: performance
- Book value measures
  - ROA
  - ROE
- Market-based measures
  - Topens Q
  - M/BV

Controlling Variables
- Firms Size
- Audit Quality

Ownership Structure
- Foreign Ownership
- Institutional Ownership
- Majority of Ownership

Existence of Audit Committee
Chapter Three:
Research Methodology
3.1 Research Approach

The main objective of the study is to examine the influence of corporate governance on the corporate performance of the listed Palestinian firms. The quantitative approach adopted to test the hypotheses of the study. In the next section, the methodology of data collection will be discussed, then clarify selected variables in details. Also, the study will explain the quantitative approach to provide a more comprehensive understanding.

3.2 Data Collection

This study covers the Palestinian companies listed in the Palestine Exchange (PEX), which provides financial data for the period from 2013 to 2017. Not all companies listed on the (PEX) will be subject to investigation. Currently, 48 companies are listed on the (PEX), but the research covered only five years, so during this period some companies withdrew their shares from the (PEX), and other companies have recently listed their shares, therefore confined to only company that can get annual reports during these five years fully identified. The research adopted quantitative approach (Secondary data) the data were obtained from the annual reports of 40 companies listed in the (PEX) to measure corporate governance mechanisms (calculate the dependent variables and some control variables) and firm performance variables for 2013 and 2017, in addition to some publication issued by (PEX). The years under study are chosen to test the impacts of Palestinian corporate governance code that was issued in 2009 on firm performance. This time series is chosen due to the availability of data, and because during the first three years the
governance code was new and not effective enough. The selection of companies was determined by the availability of data for both years.

The annual reports provide complete information about the board of directors, the committees formed such as audit committee, and about ownership structure with the detailed description. To avoid errors through collecting data from the report, some publications of the PEX were used to verify the figures and percentages.

Table 3.1 shows study sample includes 40 companies, which are distributed among the industries as follows:

Table 3.1

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Firms</th>
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<tbody>
<tr>
<td>Service</td>
<td>1. ABRAJ</td>
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<td></td>
<td>2. AHC</td>
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<td></td>
<td>3. NSC</td>
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<td></td>
<td>4. PALTEL</td>
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<td>5. PEC</td>
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<td>6. RSR</td>
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<td>7. WASSEL</td>
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<td></td>
<td>8. WATANIYA</td>
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<tr>
<td>Banks and financial</td>
<td>1. AIB</td>
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<td>services</td>
<td>2. BOP</td>
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<tr>
<td>Category</td>
<td>Company 1</td>
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<tr>
<td>Insurance</td>
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<td>Industry</td>
<td>APC</td>
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<td>Investment</td>
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</table>
The above table shows that the sample is diversified among sectors, which makes the sample highly confident and realistic. The number of companies that belong to the industrial sector is the largest proportion of the sample, while the insurance sector represents the lowest proportion of the sample. The insurance sector is 15%, banks and financial services sector represents 17.5%, the services sector and investment sector represent the equal ratio which is 20%, while the sector that is the largest sector is the industry sector which represents 27%. The ratios are fairly close and this relative distribution reduces the probability of bias to specific industry.

### 3.3 Variables of the Study

It is important to develop testable variables to test the hypotheses mentioned in Chapter 2. Based on literature review, the study developed variables that may have explanatory effect on company performance over a period. There are three kinds of
variables, including dependent variables, independent variables and control variables.

3.3.1 Dependent Variable:

Most previous research defines performance as a dependent variable and analyzes the effect of governance factors on it. Performance is an indicator of the results of the company's policies and regulations and reflects its efficiency and company profitability.

Corporate Performance:

To proxy corporate performance, accounting-based and market-based measures will be used in this study. While the book value measures include return on asset (ROA) and return on equity (ROE) (Alabdullah, 2016), the market–based measures include Tobin’s Q, which is an important and widely accepted measure of corporate performance (Carter, D'Souza, Simkins & Simpson, 2008; Ficici & Aybar, 2012), and Market to Book Value (Horváth & Spirollari, 2012) (Ararat, Aksu & Tansel Cetin, 2010).

The relationship between independent variable and dependent variables may vary according to the measuring instrument used. For example Otman (2014) studied the relationship between corporate governance and performance using book value measures (ROA, ROE), and market–based measures (Tobin’s Q) and found different results. On the other hand, Dwumah (2017) used the ROE and ROA to
measure performance and found positive relationship between corporate governance and banks and insurance companies’ performance by both measuring instruments.

**Market–based measures:**

1- Tobin’s Q, too many previous studies used Tobin’s Q as a measures tool to calculate market value for company performance (Vu & Nguyen, 2017; Otman, 2014) which is the most popular market-based measure of firm performance.

Tobin’s Q is calculated as [(TA - BVE) + MVE] / TA (Ficici & Aybar, 2012), also defined it as "the ratio of market value of the firm to the replacement cost of its assets".

TA is the book value of the firms’ total assets, BVE is the book value of the firms’ equity and MVE is the firms’ outstanding common shares price.

2- Market to Book Value (Price to Book ratio)

This ratio evaluates a market value of company relative to its book value, Indicates relationship between market price per share and book value per share.

Helps investors predict the company's ability to achieve future profits (Hassan, Naser & Hijazi, 2016).

Market value is what market believes that the company’s worth, Book value is net assets of the company. If the market value of a company is trading higher than its book value per share, it is considered to be overvalued; these mean that
the investors can pay to purchase the stock more than what is valued in balance sheet (Investopedia, 2019).

It is calculated as this equation:

\[ \text{Market to Book Ratio} = \frac{\text{Market Capitalization}}{\text{Net Book Value}} \]

(Zutter & Gitman, 2011; Investopedia, 2019).

Or

\[ \text{Market to Book Ratio} = \frac{\text{Share Price}}{\text{Net Book Value per Share}} \]

Where, Net Book Value = Total Assets – Total Liabilities

And Net Book Value per Share = \( \frac{\text{Net Book Value}}{\text{Number of Common Shares Outstanding}} \)

**Book value measures:**

Most of the previous studies used Return on asset ROA and return on equity ROE as a measures tools to calculate book value for company performance (Vu & Nguyen, 2017; Otman, 2014 ) which is the most popular book value measures of firm performance. Return on asset ROA and return on equity ROE based on the earnings after taxes.

1- Return on assets (ROA) is a profitability ratio that reflects the efficiency of a company's management in generating return from their exploitation of assets and resources on their balance sheet. (ROA) is a percentage. It is
calculated by dividing a company's net income by its total asset, and the higher percentage, the more efficient a company's management to generate profits (Investopedia, 2019).

2- Return on equity (ROE), is a measure of financial performance as the income to shareholders per dollar invested. It is calculated by dividing a company's net income by its total equity. (Brealey, Myers, Allen & Mohanty, 2012).

Return on Assets (ROA) = \( \frac{\text{Net Income}}{\text{Total Assets}} \)

Return on Equity (ROE) = \( \frac{\text{Net Income}}{\text{Total Equity}} \)

(Zutter & Gitman, 2011).

3.3.2 Independent Variables:

In this study the variables used as independent to assess the implementation the corporate governance for Palestinian companies listed in PEX are include: Board of directors effectiveness, Existence of Audit committee, Ownership structure. The relevant information that needed in the analysis is obtained from the annual reports of the listed companies.

Regarding board of director effectiveness the study investigates four variables including: BOD size, gender diversity, diligence and independence. For BOD size is measured by counting the total number of board directors within a year. For gender diversity measured by calculate the percentage of female from total number
of board of directors. For diligence variable measured by how many times the board meetings within a year. For BOD duality, if the Executives and the BODs are served by the same individuals where a score 0 is given to it, otherwise, where a score 1 is given to, it is evaluated by using a method called binary variables (Vu & Nguyen, 2017), this is clarified and defined the independent director who has no relationship with the company as a mention in Singaporean Code of Corporate Governance (2012), that similarity with the Code of Corporate Governance in Palestine (2009) has been clarified that it is not desirable that the President of the BOD or any member of the Board exercise executive functions in the Company in order to accountability.

Regarding existence of Audit committee, it is considered an optional committee in Palestinian companies. According to the Code of Corporate Governance in Palestine (2009), the BOD should be forms the Audit Committee in order to ensure the transparency of the Company’s accounts and to inform shareholders and other stakeholders of the size of the risks facing the Company. Where a score 1 is given to the company if it has an audit committee, 0 = otherwise.

Regarding Ownership structure, the study investigates three variables including: Foreign Ownership, Institutional Investors, and Majority of Ownership. For foreign ownership it is measured by calculating the percentage of ordinary shares held by foreign investors. For institutional investors they are measured by evaluating the percentage of ordinary shares held by institutional investors.
Regarding majority ownership, the Code of Corporate Governance in Palestine (2009) clarified that BOD ensures the protection of small shareholders rights in cases of corporate mergers or disposition of one of their principal assets, under the laws, regulations and instructions. Also, the right of fair treatment of all shareholders and having the same rights, without any costs. The right for cash and in kind distributions. The right to invite all shareholders to ordinary and extraordinary general assembly meetings and to obtain information in accordance with the company's bylaws. This variable is measured by percentage of ordinary shares owned by shareholders having minimum of 5 per cent of firm (Hassan, Hijazi & Naser, 2017).

3.3.3 Control Variables

In addition to the above corporate governance variables in the context of examining the relationship between corporate governance and firm performance, two variables that may affect their financial performance treated as a control variables and employed in the current study are including: firm size and external audit quality.

From the prior literature, firm's size is measured by the natural logarithm of total asset (El-Chaarani, 2014; Bai, 2013; Ararat, Aksu & Tansel Cetin, 2010; Alabdullah, 2016; El-Chaarani, 2014; Ararat, Aksu & Tansel Cetin, 2010; Yatim, Kent & Clarkson, 2006). Audit quality This variable takes the value 1 if the clients firm is working with one of the “Big 4” auditors, (KPMG), (Deloitte), (PwC), and (Ernst & Young), and 0 otherwise (Mangena & Tauringana, 2006; Desender, Aguilera, Lópezpuertas-Lamy & Crespi, 2016).
Summary of measurement methods for variables in the table below:

**Table 3.2**

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Variables</th>
<th>Measurement</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CP</strong></td>
<td>Corporate Performance</td>
<td>ROA, ROE, Tobin’s Q, MBV.</td>
<td>(Vu &amp; Nguyen, 2017; Otman, 2014)</td>
</tr>
<tr>
<td><strong>ROA</strong></td>
<td>Return on Asset</td>
<td>(Net Income) / (Total Assets)</td>
<td>(Vu &amp; Nguyen, 2017; Otman, 2014)</td>
</tr>
<tr>
<td><strong>Q</strong></td>
<td>Tobin’s Q</td>
<td>[(TA - BVE) + MVE] / TA</td>
<td>(Ficici &amp; Aybar 2012) (Vu &amp; Nguyen, 2017; Otman, 2014)</td>
</tr>
<tr>
<td><strong>MBV</strong></td>
<td>Market to Book Ratio</td>
<td>Share Price / Net Book Value per Share</td>
<td>(Hassan, Naser &amp; Hijazi, 2016) (Zutter &amp; Gitman, 2011)</td>
</tr>
<tr>
<td>-----</td>
<td>------------</td>
<td>---------------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>BD</td>
<td>Board Diligence</td>
<td>Number of board meetings every year.</td>
<td>Hashim &amp; Abdul Rahman (2011) Johl, Kaur, and Cooper (2015),</td>
</tr>
<tr>
<td>Dual</td>
<td>Duality</td>
<td>If the Executive and the BOD are served by the same individual where a score 0 is given to it, otherwise, where a score 1 is given.</td>
<td>El-Chaarani (2014) Azeez (2015), Vu &amp; Nguyen (2017)</td>
</tr>
<tr>
<td>GD</td>
<td>Gender Diversity– Female %</td>
<td>Percentage of female from total number of board of directors.</td>
<td>Horváth &amp; Spirollari (2012)</td>
</tr>
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<td>Table:</td>
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</tr>
<tr>
<td><strong>AC</strong></td>
<td>Audit Committee</td>
<td>Where a score 1 is given to the company if it has an audit committee, 0 = otherwise</td>
<td>(Darko, Aribi &amp; Uzonwanne, 2016) “(Rhode &amp; Packel, 2014), (Hassan, Naser &amp; Hijazi, 2016)</td>
</tr>
<tr>
<td><strong>FO</strong></td>
<td>Foreign Ownership</td>
<td>Percentage of ordinary shares held by foreign investors.</td>
<td>(Anum Mohd Ghazali, 2010; and Bebchuk, Weisbach, 2010)</td>
</tr>
<tr>
<td><strong>IO</strong></td>
<td>Institutional Ownership</td>
<td>Percentage of ordinary shares held by institutional investors.</td>
<td>(Desender, Aguilera, Lópezpuertas-Lamy &amp; Crespi, 2016; Wong, 2016)</td>
</tr>
<tr>
<td><strong>FS - TA</strong></td>
<td><strong>Firm Size</strong></td>
<td>Measured by the natural logarithm of total asset.</td>
<td>(El-Chaarani, 2014; Bai, 2013; Ararat, Aksu &amp; Tansel Cetin, 2010; Alabdullah, 2016)</td>
</tr>
<tr>
<td><strong>EA</strong></td>
<td><strong>External Auditor</strong></td>
<td>Type of audit company if it is big four or not, variable takes the value 1 if the client firm is working with one of the “Big 4” auditors, (KPMG), (Deloitte), (PwC), and (Ernst &amp; Young), and 0 otherwise</td>
<td>(Desender, Aguilera, Lópezpuertas, Lamy &amp; Crespi, 2016; Mangena &amp; Tauringana, 2006; Fan &amp; Wong, 2005)</td>
</tr>
</tbody>
</table>

### 3.4 The Model of Study

This study is considered quantitative research to test and verify the hypotheses, this approach enables the reader to better identify and to understand the theory based on the study "Quantitative research findings can be predictive, explanatory and confirming "(Otman, 2014). It follows the panel data approach where data include both time series data (reflected in the five years changes within the studied firms over time), and cross-sectional elements (reflected in the different variables..."
representing specific features (Brooks, 2019 and Creswell & Creswell, 2017) of Palestinian firms under the study are derived from the annual reports) to investigate the relationship between the implementation of the corporate governance and firms performance.

The study regression model is summarized in the following equation:

$$ COPR_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BD_{it} + \beta_3 DUAL_{it} + \beta_4 GD_{it} + \beta_5 AC_{it} + \beta_6 FO_{it} + \beta_7 IO_{it} + \beta_8 MO_{it} + \beta_9 FS_{it} + \beta_10 EA_{it} + \varepsilon $$

3.5 Statistical Technics

The descriptive, correlation and regression analysis will be done in chapter four for 40 companies listed on PEX over the period 2013-2017, the observations will be 200 observations. The data will be analyzed using the (E-view) to obtain quantitative measures of descriptive statistics.

Descriptive analysis will be done for four dependent variables (4 models) and eight independent variables in addition to two control variables, where the minimum, maximum, mean, and standard deviation will be calculated (Chapman, Lawless & Boor, 2001).
Also, the correlation analysis will do in chapter four to show the correlation between the independent variables, dependent variables, and control variables, then to avoid multicollinearity between independent variables (Otman, 2014).

Regression analysis is used to study the effects of independent variable on the dependent variables (Abdelrazik, 2017). The regression is based on panel data, three ways of panel data analysis approaches that can be employed (Adefemi, 2017):

1) Independently Pooled OLS Regression Model. It is one of the most popular estimators used by pool all the observations as a single intercept; it is ignore the cross section, time series and panel (Abdelrazik, 2017).

2) Fixed Effect Model. It is pool all observations such as OLS but includes an intercept for each cross section unit.

3) Random Effect Model. The intercept is assumed to be random for each sampling unit in this model and the variables do not change over time, it is assumes variation between cross-section units over time.

Adefemi (2017) clarified the steps for each model and how to choose between models by Correlated Random Effects- Hausman Test, it is explained if probability value in Hausman Test is greater than 5%, Random Effect Model is appropriate, if the probability value is less than 5%, fixed Effect Model is appropriate and reject the Random Model.
Pagan Test is going too applied to determine the appropriate model between Fixed and Pooled OLS Regression Model. If probability value of Pagan Test is greater than 5% Pooled OLS Regression Model is appropriate, if probability value of the Pagan Test is less than 5% Fixed Effect Model is appropriate.
Chapter Four:

Empirical Analysis and Discussions
Chapter Four: Empirical Analysis and Discussions

This chapter presents and discusses the findings of the descriptive, correlation and regression analysis, it is show the relationship between study's variables and effect some factors on company performance, it is clarified how much the result consistency or no consistency with study hypotheses and analyze reasons for that.

4.1 Descriptive Analysis

This section aims to show the descriptive statistics. Table 4.1 presents the data summary for 200 observations over five years (2013-2017) with main measures such as minimum, maximum, mean and standard deviation for all dependent variables (ROA, ROE, Tobin’s Q, M/ BV), independent variables (BOD Size, Gender Diversity, Diligence and Independence, Audit Committee, Foreign Ownership, Institutional Investors, and Majority of Ownership) and control variables (Corporate size and External auditor quality) under the study.
Table 4.1 Descriptive results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Year</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<td></td>
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<tr>
<td>2013</td>
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<td>0.261</td>
<td>0.029</td>
<td>0.071</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>40</td>
<td>-0.194</td>
<td>0.225</td>
<td>0.011</td>
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<tr>
<td>2015</td>
<td>40</td>
<td>-0.622</td>
<td>0.219</td>
<td>0.012</td>
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<tr>
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<td>40</td>
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<td>0.214</td>
<td>0.029</td>
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<tr>
<td>2017</td>
<td>40</td>
<td>-0.134</td>
<td>0.188</td>
<td>0.037</td>
<td>0.056</td>
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<tr>
<td>Pooled</td>
<td>200</td>
<td>-0.622</td>
<td>0.261</td>
<td>0.024</td>
<td>0.081</td>
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<tr>
<td><strong>ROE</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>40</td>
<td>-0.254</td>
<td>0.278</td>
<td>0.053</td>
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<tr>
<td>2014</td>
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<td>0.438</td>
<td>0.025</td>
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<td>2016</td>
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<td>2017</td>
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<td>0.075</td>
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<td>0.046</td>
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<tr>
<td><strong>M/BV</strong></td>
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<tr>
<td>2013</td>
<td>40</td>
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<td>4.959</td>
<td>1.153</td>
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<td>4.505</td>
<td>1.098</td>
<td>0.614</td>
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<td></td>
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<td>2017</td>
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<tr>
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<td>Proportion</td>
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As noted from the table 4.1, the mean of performance measures (accounting - based measures) for Palestinian companies listed on PEX is relatively low. The mean of corporate performance measured by ROA for the sample as a whole during 2013–2017 was 2.4%; ranging from -62.2% to 26.1%. Similarly, the mean of corporate performance measured by ROE was 4.6%; ranging from -120.9% to 48.3%.

Over the five-year period, there were notable changes in the ROE. The percentage of ROE in 2013 is 5.3% then decreased in 2014, 2015 to 2.5%, 1.8% respectively, but in 2016, 2017 increased to 6%, 7.5% respectively.

As for the market performance measures, the mean of corporate performance measured by M/BV was 117.5% ranging from 27.2% to 495.9%. The mean of corporate performance measured by TOBIN Q was 109.6% ranging from 30.5% to 450.5%. MBV decreased only from 115% in 2013 to 113.7% in 2014, then increased to 117.7% in 2015, 120% in 2016 and 2017.

As noted above, the mean of the two market performance measures are more than one. This gives indicator that the market values of firms are more than their book values. This means that firms are creating value for investors.

Regarding the board size variable, the mean of about eight directors for the whole sample ranged from five members to fifteen. This result is consistent with Vu & Nguyen (2017) they found that the optimal BOD members are around seven to eight members. When the board size is appropriate, this helps directors to make decisions more easily and effectively.
The board diligence (frequency board meetings) ranged from two to thirteen with a mean of around six board meetings in a year. This result is consistent with Hassan, Naser & Hijazi (2016).

Regarding the duality ratio, as can be seen from the table, mean of the sample is 25%. This finding indicates that a quarter of Palestinian listed companies not follow the mechanism of role separation between the board of directors and the executives. The percentage dropped from 32.5% in 2013 to 22.5%, 20%, in 2014, 2015 respectively, then it increased in 2016, 2017 to 22.5%, 25% respectively. This decrease in the percentage from 2013 to 2017 gives a good indication; this means that companies are reducing duality, which is consistent with the terms of governance.

The female percentage in BOD is very low with a mean of 5.5% ranged from zero to 42.9%, this indicates that women have few participation in senior positions or no participation in some companies at all. The percentage increased slowly over the years from 4.5% in 2013 and reached up to 6% in 2017.

As for the existence of audit committee variable, the table shows that 71% of listed Palestinian companies have audit committees. This indicates that most of these companies have audit committees. And the percentage jumped over the years from 55% in 2013 and reached up to 80% in 2017, this is an indication that some companies have established the Audit Committee and are interested in its existence.
According to ownership variables the above table shows that foreign ownership mean is 23.5%. As for majority mean is 55.1 from minimum zero to maximum 96%. As for institution ownership mean is 60% (pooled from 2013 to 2017). The percentage increased over the years from 55% in 2013 to 62.5% in 2017.

According to control variables, the table shows firm size mean is 774.8% from minimum 618.9% to maximum 968.9%. About external auditor 55% from Palestinian firms are audited by big four auditing companies (KPMG, Deloitte, PwC, and Ernst & Young) in 2013 and 75% in 2017; this mean the companies are deal with big four auditing companies more than before. Regarding for external auditors the percentage increased over the years from 55% in 2013 to 75% in 2017.

4.2 Correlation Analysis
This section presents the correlation between the independent variables, dependent variables, and control variables. The goal of knowledge of correlation coefficient is to avoid multicollinearity between independent variables (Otman, 2014). The correlation analysis of firm performance, corporate governance mechanism variables and control variables are shown in Table 4.2. This analysis was observed the negative or positive relationships between all of the variables, and to check for multicollinearity.
Table 4.2 Correlation Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th>ROE</th>
<th>M/BV</th>
<th>Tobin's Q</th>
<th>BS</th>
<th>BD</th>
<th>Dual</th>
<th>GD %</th>
<th>AC</th>
<th>FO</th>
<th>IO</th>
<th>MO</th>
<th>FS</th>
<th>EA</th>
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<td></td>
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<tr>
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<td>1.000</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
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<td>-0.016</td>
<td>0.919</td>
<td>1.000</td>
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<td></td>
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<td></td>
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<tr>
<td>BD</td>
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<td>0.040</td>
<td>0.044</td>
<td>0.018</td>
<td>0.038</td>
<td>1.000</td>
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<td></td>
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<tr>
<td>Dual</td>
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<td>0.008</td>
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<td>-0.180</td>
<td>-0.079</td>
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<tr>
<td>GD %</td>
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<td>0.153</td>
<td>0.048</td>
<td>0.087</td>
<td>-0.225</td>
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<tr>
<td>AC</td>
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<td>-0.299</td>
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<td>0.231</td>
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<td>-0.153</td>
<td>0.387</td>
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<td>0.183</td>
<td>0.064</td>
<td>1.000</td>
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<td>0.024</td>
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<td>-0.270</td>
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<td>0.447</td>
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</table>
As shown in Table 4.2, for board of directors’ effectiveness, the board size variable negatively correlated with Tobin's Q and M/BV (correlation coefficient= -0.24), but there no significant correlation with ROA and ROE.

Duality variable has a negative correlation with M/BV (correlation coefficient= -0.22), and Tobin's Q (correlation coefficient= -0.18).

The family percentage correlation is positive with all dependent variables, significantly correlated with ROA, ROE (correlation coefficient = 0.18, correlation coefficient = 0.15, respectively).

Table 4.2 also shows the correlation result for audit committee with firm performance measures. Audit committee has a positive correlation with market measures M/BV, and Tobin's Q (correlation coefficient= 0.13, correlation coefficient= 0.10, respectively).

For ownership structure variables, Table 4.2 shows that foreign variable correlated with M/BV and Tobin's Q positively (correlation coefficient= 0.11, and 0.19 respectively).

The institution variable has a negative correlation with market value measures ROA, ROE (correlation coefficient= -0.17, correlation coefficient= -0.25, respectively), but a positive relation with M/BV (correlation coefficient= 0.12).
The majority variable negatively correlated with ROA, and ROE (correlation coefficient= -0.16, correlation coefficient= -0.17, respectively), but correlated positively with M/BV and Tobin's Q (correlation coefficient= 0.27, correlation coefficient= 0.25, respectively).

For control variables, Table 4.2 shows a positive correlation between firm size and all performance measures ROA, ROE, M/BV and Tobin's Q (correlation coefficient= 0.23, correlation coefficient= 0.25, correlation coefficient= 0.23, correlation coefficient= 0.15, respectively). External auditor variable and market value measures (M/BV and Tobin's Q) are correlated positively (correlation coefficient= 0.22, and 0.17, respectively).

Table 4.2 also shows the correlation between all independent variables to each other. Board size has a negative correlation with family percentage (correlation coefficient= -0.22), but has a positive relationship with foreign, institution, firm size and audit quality (correlation coefficient= 0.11, 0.15, 0.40 and 0.18, respectively). Meeting variable has a negative correlation with institution and majority, (correlation coefficient= -0.22, correlation coefficient= -0.29, respectively). Duality correlated negatively with foreign, institution, majority, firm size and audit quality (correlation coefficient= -0.17, -0.29, -0.30, -0.11 and -0.39, respectively).
The relationship between family percentage with all independent variables is negative, family percentage correlated with audit committee at correlation coefficient = -0.29, with institution =-0.38, with foreign =-0.12, and with majority =-0.32.

Audit committee is correlated positively with ownership structure variables at correlation coefficient = 0.28 with institution, 0.32 with foreign, and 0.27 with majority. Also positively with control variable for example (correlation coefficient with audit quality= 0.46),

Institution and foreign correlation is positive (correlation coefficient= 0.18), as well as with majority (correlation coefficient= 0.65). Foreign variable correlated positively with majority (correlation coefficient= 0.17). Firm size correlated with audit quality positively at correlation coefficient 0.53.

Finally, (Otman, 2014) indicate that if correlation between independents variables less than 80%, no multicollinearity problem. In this study the correlation between all independent variables is low, except the correlation between institution and majority they are the highest correlation coefficient = 0.65. There is lower than 0.8, so no serious multicollinearity between independent variables, as shown in correlation in Table 4.2

4.3 Regression Analysis
The regression analysis conducted to analyze the influence and relation between corporate governance mechanisms and the performance of Palestinian firms.
Firstly, Hausman test, Pagan test and OLS test applied to determine which is test appropriate, Random Test or Fixed Test.

Table 4.3 Model selection tests

<table>
<thead>
<tr>
<th>Dependent</th>
<th>OLS test</th>
<th>Pagan test</th>
<th>Hausman test</th>
</tr>
</thead>
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<td></td>
<td>F</td>
<td>P-value</td>
<td>Chi-square</td>
</tr>
<tr>
<td>ROA</td>
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<td>5.91</td>
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<tr>
<td>ROE</td>
<td>5.116</td>
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<td>53.57</td>
</tr>
<tr>
<td>Tobin's Q</td>
<td>5.0045</td>
<td>0.000</td>
<td>34.96</td>
</tr>
<tr>
<td>M/BV</td>
<td>5.0014</td>
<td>0.000</td>
<td>41.08</td>
</tr>
</tbody>
</table>

Based on Table 4.3, Hausman test applied for each dependent variable, to find the relationship between dependent variables and independent variables. According to Table 4.3 result, the probability value for ROA regression in Hausman test equals 0.5256 (more than 5%) so, the random test is appropriate. The probability value for ROE regression in Hausman test equals 0.1678 (more than 5%), the random test is appropriate. The probability value for Tobin's Q regression in Hausman test equals 0.1698 (more than 5%), the random test is appropriate. But the probability value for M/BV regression in Hausman test equals 0.0393 (less than 5%), the Fixed Test is appropriate, then Pagan test done to determine which test is appropriate.
In summary, based on the results of the Hausman test and Paggan test reported in Table 4.3 for the four performance measures (ROA, ROE, Tobin's Q and M/BV), the Random effect model was appropriate to ROA, ROE, Tobin's Q, while the fixed effect model was appropriate to M/BV.

Table 4.4 Regression models using ROA, ROE, Tobin's Q and M/BV as dependent variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression 1 ROA (Random effect)</th>
<th>Regression 2 ROE (Random effect)</th>
<th>Regression 3 Tobin's Q (Random effect)</th>
<th>Regression 4 M/BV (Fixed effect)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.0834 0.2657</td>
<td>-0.4592 0.0007</td>
<td>2.0793 0.0001</td>
<td>6.5449 0.0030</td>
</tr>
<tr>
<td>BS</td>
<td>-0.0035 0.2669</td>
<td>-0.0055 0.3177</td>
<td>-0.0376 0.0798</td>
<td>-0.0208 0.4702</td>
</tr>
<tr>
<td>BD</td>
<td>-0.0050 0.2528</td>
<td>-0.0048 0.5376</td>
<td>0.0564 0.0622</td>
<td>0.0049 0.8757</td>
</tr>
<tr>
<td>DUAL</td>
<td>-0.0112 0.4483</td>
<td>-0.0332 0.2094</td>
<td>-0.0298 0.7703</td>
<td>0.0847 0.4243</td>
</tr>
<tr>
<td>GD</td>
<td>0.0531 0.3914</td>
<td>0.0595 0.5896</td>
<td>1.1121 0.0096</td>
<td>-0.4506 0.5793</td>
</tr>
<tr>
<td>AC</td>
<td>-0.0201 0.2356</td>
<td>-0.0120 0.6897</td>
<td>0.0400 0.7304</td>
<td>0.0650 0.5452</td>
</tr>
<tr>
<td>FO</td>
<td>0.0109 0.6329</td>
<td>-0.0184 0.6502</td>
<td>0.3603 0.0223</td>
<td>-0.2269 0.5265</td>
</tr>
<tr>
<td>IO</td>
<td>-0.1123 0.0030</td>
<td>-0.2420 0.0004</td>
<td>0.2953 0.2522</td>
<td>-0.3585 0.5666</td>
</tr>
<tr>
<td>MO</td>
<td>0.0472 0.2511</td>
<td>0.1330 0.0706</td>
<td>0.2391 0.3977</td>
<td>0.7688 0.0278</td>
</tr>
<tr>
<td>FS</td>
<td>0.0262 0.0131</td>
<td>0.0866 0.0000</td>
<td>-0.2109 0.0039</td>
<td>-0.7093 0.0128</td>
</tr>
<tr>
<td>EA</td>
<td>0.0179 0.2731</td>
<td>-0.0120 0.6809</td>
<td>0.2492 0.0274</td>
<td>0.1113 0.3621</td>
</tr>
</tbody>
</table>

R-squared | 0.1245 | 0.1938 | 0.2250 | 0.9009 |
Adjusted R-squared | 0.0782 | 0.1511 | 0.1840 | 0.8685 |
F-statistic | 2.6883 | 4.5423 | 5.4867 | 27.8301 |
Prob. (F-statistic) | 0.0042 | 0.0000 | 0.0000 | 0.0000 |
The findings off all four regression models were presented in Table4.4. In regression 1 and 2 accounting measures of corporate performance were used as dependent variables, in regression 3 and 4 market measures of corporate performance were used as dependent variables. As shown in Table 4.4 the four regression models have a significant power; probability (F- statistic) less than 5%; the probability (F- statistic) for ROA, ROE, Tobin's Q and M/BV equals 0.0042, 0.0000, 0.0000 and 0.0000, respectively with R-square equals 0.1245, 0.1938, 0.2250, and 0.9009, respectively. The first R-square percentage indicates that 12.5% of the change in ROA is explained by changes in the corporate governance mechanisms of board effectiveness, existence of audit committee and ownership structure, and so on.

Many studies have found a low R-square in their regression result (Borlea, Achim & Mare, 2017; Dzingai & Fakoya, 2017 and Otman, 2014), so the research R-square is not surprise.

R-square reflects the strength of the relationship between dependent variable and study model; it is means how many the factors that were studied in this research have influence on performance (Jiang & Smith, 2002). However, there are other factors that may affect the dependent variable were not taken into account.

**4.3.1 Board Size**

As presented in the Random test result (Table 4.4), there is a negative relationship between board size and each of the financial performance measures employed in the study, namely ROA, ROE, Tobin's Q and M/BV (coefficient = -0.0035, -0.0055, -0.0376 and -0.0208, respectively). Board size is marginal significant at 10% related
to firm performance measured by Tobin’s Q (probability value equals 0.0798). This finding reveals that financial performance of Palestinian firms is influenced negatively by the number of directors on their board. Although this negative relationship is in consistent with some previous studies (Vu & Nguyen, 2017; Azeez, 2015; Bai, 2013), it contradicts many prior findings (Alabdullah, 2016; Anderson, Mansi & Reeb, 2004). Therefore, the first study hypothesis which states a negative relationship between the board of directors’ size and corporate performance of companies listed on PEX is accepted. This result reflect that a high number of BOD decrease the efficiency, make weakness in communication and difficulty in making decisions, then rise a cost and decrease performance. The most literature review recommends that the number of board members be around seven and nine (Vu & Nguyen, 2017; Otman, 2014), but when study Palestinian companies found the number of members arrive fifteen.

**4.3.2 Board Diligence**

Table 4.4 showed negative but insignificant relationship between board of directors meeting and ROA/ROE. But meetings variable related positively with Tobin's Q and M/BV such as (Hashim & Abdul Rahman, 2011; Clarkson, 2006). Tobin's Q measures reflect marginal significant positive relation between board diligence and firm performance (at 10%) (Probability value = 0.0622).

The market based measures Tobin's Q and M/BV contrary the hypothesis that assumed negative relationship. This positive relation in line with perspective that say the board frequent meeting improve board performance; opens the way for it
members for discussion broadly in company decisions and issues and exchange experiences and skills among them.

4.3.3 Duality of the Board of Directors
The regression analysis shows that while CEO duality is an negatively related to ROA, ROE and Tobin's Q financial performance measures, duality is positively associated with M/BV. However, these associations are not significant. Therefore, while the third hypothesis stated that there is a negative relationship between the CEO duality and corporate performance of companies listed on PEX, the hypothesis is only partially supported under three measures (ROA, ROE and Tobin's Q), it is rejected under M/BV measure. This finding suggests the listed Palestinian firms without CEO duality perform better than those with such duality. The Palestinian Corporate Governance Code focused on this a point that it is not desirable the President of the BOD or any member of the Board to exercise executive functions in order to independence and accountability; which helps in making decisions that guarantee improved performance, (Chaarani, 2014; Cheema & Din, 2013; Anum Mohd Ghazali, 2010; Aksu & Tansel Cetin, 2010) this previews researches support this result. But in reality, the Palestinian market suffers from duality, and this is reflected in the annual reports, due to family ownership in Palestinian companies, and because of the governance code not obligate companies to appoint independent members in there BOD.
4.3.4 Gender Diversity
As shown in Table 4.4, we found a positive insignificant relationship between number of female included in board of directors and corporate performance under (ROA and ROE). Female percentage has positive and significant relationship with performance under Tobin's Q regression (at 5%), (the coefficient equal 1.1121, and the probability value equal 0.0096). This result support research hypothesis and it is consistent with studies (Darko, Aribi & Uzonwanne, 2016; Ararat, Aksu & Tansel Cetin, 2010; Terjesen, Sealy & Singh, 2009) that support the role of women in the Board of Directors. The women have enough skills and experiences to exercise important role in company board in Palestinian companies and improve monitoring. They have sufficient power to makes board more effective, and then enhance performance.

In summary, in the field of corporate governance the BOD have a little effect on Palestinian companies, this is due to the nature of corporate ownership in Palestine, where it are characterized by highly concentrated ownership by families and companies; that means it are governed by specific groups of major capital in the country, which enables these groups to use their power to influence on decisions taken by the Board of Directors (Borlea, Achim & Mare, 2017; Marashdeh, 2014; Dulaimi, Giritli, Topcu- Oraz & Acar, 2007). In addition, the Governance Code in Palestine did not compel companies to appoint independent board members to avoid bias for personal interests. Most of the developing countries suffer from concentrated ownership, not just Palestine (Marashdeh, 2014).
4.3.5 Existence of audit committee
According to the results, the analysis shows that the audit committee variable insignificantly related to all corporate performance measures negatively with accounting measures and positively with market based measures. The result is partially supported hypothesis under (Tobin's Q and M/BV), but rejected under (ROA, ROE). The study results explain that audit committee in Palestine not effective. May be the existence it is just a decoration and do not contribute to increased performance, due to the existence of the audit committee is optional according to the terms of governance code in Palestine. It is better to be mandatory, the companies should pay attention to the quality and qualifications when choose AC director and members they should be professionalism, experienced and skilled, and set strict criteria when selecting them. The result is not surprise, (Ghabayen, 2012; Kajola, 2008; Turley & Zaman, 2004) also not found any significant effect for AC on performance.

4.3.6 Foreign Ownership
As shown in table 4.4, the foreign ownership is positive significantly related with performance when used Tobin's Q (at 5%), (Coefficient equals 0.3603, probability value equals 0.0223). But other performance measurement not found any significant relation with foreign ownership. So, the hypothesis is rejected when study use the Tobin's Q, but when use (ROE and M/BV models) the hypothesis is partially accepted. The result is similar with the view of (Bebchuk, Weisbach, 2010; Aydin, Sayim & Yalama, 2007) they indicate that foreign ownership have better
qualification and investment skills than local ownership and they focuses and tracks the value of the company on the market through the websites and the stock exchange. In addition, foreign investors prefer large and profitable companies (Mangena & Tauringana 2006), and they have higher ability to control and monitor, lower operational costs that resulted from adoption of new technology, then develop performance. Foreign shareholders invested by large capital, so plays an important role for decision making, developing and economic growth.

Foreign investors in Palestine are bring to Palestinian companies experiences and innovations that enhance their productivity and performance, so, they have positive impact on corporate performance.

4.3.7 Institutional Ownership
Regression models show that the relationship between institutional ownership and performance is significant negative (for book value measures ROA and ROE models), (coefficient equals -0.01123 and -0.2420 respectively. Probability value equals 0.0030 and 0.0004 respectively, are less than 5%). This output indicates that institutional investors are interested in firm book value because the relation is significant with (ROA and ROE), the institutional ownership effects negatively on performance because they are interested in short term earnings in assessing firm value (Rajgopal, Venkatachalam & Jiambalvo, 1999) and have greater voting power (Bhojraj & Sengupta, 2003) may be utilized for their interest. McCahery, Sautner & Starks (2016) and Hassan, Naser & Hijazi (2016) found the same result. But the relationship of institutional ownerships with market measures (Tobin's Q
and M/BV) is insignificant. The hypothesis is accepted for book value measurement (ROA & ROE). So, the institutional ownership effect negatively on company performance and decrease the productivity. The hypothesis that assumed negative relation is accepted under accounting performance measurements. Most of Palestinian companies owned by insinuation investors and have high owner equity so they use this control as strengths, institutional ownership pressure on management to achieve its goals or its threatens management by exit from the company (McCahey, Sautner & Starks, 2016). Institutional ownership have incentives to maximize their own interests, they does not concern the interests of minority ownership, which creates a conflict between them influence negatively on productivity and performance (Hassan, Naser & Hijazi 2016).

4.3.8 Majority Ownership
The regression analysis found a Positive relationship between corporate performance and majority ownership under all performance models, (coefficient equals 0.0472, 0.1330, 0.2391 and 0.7688 for ROA, ROE, Tobin's Q and M/BV respectively). This result opposed hypothesis that state negative influence on performance, so the hypothesis is rejected. The relation significant when use ROE and M/BV just (Probability value equals 0.0706 and 0.0278 respectively). Majority ownerships have power for monitoring management, controlling company, enhance performance and increase growth rate (Khamis, Hamdan & Elali, 2015). Large shareholders more interested to increase profit and market value that, this is useful for the value of their investments (Darko, Aribi & Uzonwanne, 2015).
In Palestine, the most of majority ownership is decision-making people in the country and the owners of large capital. Thus, their investments play a role in the economic recovery, which affects improving the performance of companies in general.

4.3.9 Control Variables
As for the control variables, the results illustrate that firm size has significant relation with company performance for all dependent variables (ROA, ROE, Tobin's Q and M/BV) the probability equals 0.0131, 0.0000, 0.0039 and 0.0128 respectively. Positive relationship between firm size and a firm performance in accounting based measures is found (ROA, ROE), coefficient =0.0262, 0.0866 respectively. This finding is in a line with previous researches such as (Azeez, 2015; Neubaum & Zahra, 2006 and Neubaum & Zahra 2006). That means large Palestinian firms have high performance level because they are using new technology and developed production techniques (Hassan, Naser & Hijazi, 2016), they have the capabilities to apply governance features and its size forces it to interest in governance, in order to maintain its profits and performance in the market.

Noted in the results a negative relationship between firm size and firm performance in market based measures (Cole, Elliott & Strobl 2008) (Tobin's Q and M/BV), coefficient = -0.2109 and -0.7093 respectively. This view can be explained by the large companies may be lose control over their resources and employees and cannot operate them effectively, thus losing its reputation and value in the market. Ararat,
Aksu & Tansel Cetin (2010) found the same results, positive with accounting measures but negative in market measures.

Therefore, the study hypothesis which states that there is a positive relationship between the firm size and corporate performance of companies listed on PEX is accepted when used (ROA, ROE), this result is consistent with Azeez, A. A. (2015); Neubaum & Zahra (2006); Hassan, Naser & Hijazi (2016), but contrary with Alabdullah (2016), for use other models the hypothesis is rejected.

As shown in table 4.4, the type of external auditor is positively and significant related with corporate performance measurement (Tobin's Q) (Coefficient equals 0.2492, probability value equals 0.0274), also positive relation with ROA and M/BV but not significant, so the hypothesis is accepted. While a positive relationship with Tobin's Q and M/BV, so the hypothesis is accepted. Some researchers have had similar result when they tested the relationship between firm performances and type of external auditor (Fan & Wong, 2005). The positive significant result indicate that "Big 4" auditors play role in achieve corporate governance mechanisms and enhance performance because of the big 4 auditors are international companies; they work by high quality and control, prevent fraud and financial theft cases as much as possible. As there are a number of Palestinian companies, especially the large ones, that deal with international auditing companies, which contributes to developed performance and benefit from
international procedures in applying the rules of governance and successful practical experiences in some countries in the governance field.
Chapter Five:

Conclusion, Limitation and Further Research
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5.1 Conclusion

This study investigates the impacts of corporate governance mechanisms on firm performance in Palestine market. In Palestine, the code of corporate governance was issued by The National Committee for Corporate Governance in 2009. The Code of Corporate Governance in Palestine applies to all public shareholding companies listed or not listed on Palestine Exchange (PEX). It aims at enhancing corporate performance.

The Palestinian economy is less developed than other countries (Abdelkarim & Ijbara, 2010), but in governance aspect it has improved compared to the past (Hassan, Naser & Hijazi, 2016).

The research analyzed data collected from annual report for 40 firms listed on PEX covering the period from 2013 to 2017. The corporate governance in this study is measured by three mechanisms. Firstly, BOD effectiveness including the BOD size, BOD Diligence, duality of the Board of Directors and Gender Diversity. Secondly, Audit Committee Existence. Thirdly, Ownership Structure including Foreign Ownership, Institutional Investors and Majority of Ownership. In addition to controlling variables including firms’ size and external audit quality as well. Firm performance, which is measured in both accounting based measures (ROA and ROE) and market-value measures (Tobin’s Q and M/BV). The descriptive,
correlation and regression analysis is conducted in this study. The regression is based on panel data set covering 40 companies, while the observations were 200 observations.

The results show that there is a negative relationship between board of directors' size, institution ownership and firm performance. Positive relationship between board diligence, gender diversity, foreign ownership, majority ownership, and audit quality with company financial performance. For firm size related positively to performance under book value models, but negatively under market value models. Also the results found a negative but not significant relation between BOD duality and performance, with regard to existence of audit committee also it found not significant impact on performance which means that AC is just a decoration and not be allowed to do its role properly.

These results are consistent with other studies, but opposed to others. These variations in results that observed in the literature reviews are due to differences in the variables, models, data or testing procedures employed (Schultz, Tan & Walsh, 2010), in addition to other factors' effect on performance positively or negatively are not related to corporate governance, such as competition in the market and the laws applied in the country or the presence of some political problems that affect the performance of companies and economy as a whole, such as the Israeli Occupation, and the consequent delay the transfer of clearance funds for political and national reasons, that are the right of the Palestinian National Authority, and subsequently the interruption of salaries for several months, which causes a
recession in the Palestinian market, all of this falls under what is called endogeneity in corporate governance performance.

Corporate Governance system in Palestine has been enhancing compared when issued in 2009. The research results show the improvement of the effect of corporate governance on performance compared with previous study which tested corporate governance effect between 2010-2012 (Hassan, Naser & Hijazi, 2016). Still, it is not an effective improvement; seemingly it is just a decoration. It needs adjustments and improvements to make it efficient enough. Palestinian Governance System needs controls to obligate companies to apply the code's rules. The code must put conditions to make its rules mandatory or edit the companies' law to comply with the Code.

After the weakness noted in the application of the Code of Governance, the research recommends adding amendments and improvements to the Corporate Governance Code to make it more mandatory and more useful for companies from the actual and real aspect. For example, it is recommended to set mandatory provisions on the steps and stages that obligate companies to form an audit committee and whose members are highly skilled and experienced. It is also recommended that members of the Board of Directors or part of them to be independent and don't allow duality in companies.
5.2 Limitation of the Study

This study is conducted for the fulfillment of Master Degree. So, it suffered from some limitations. The main limitations of the study are that the study used some variables; it is possible that there are more important factors that affect performance which are not taken into consideration, and it is limited because of time constraints. There are some important factors which effected performance and are not studied because they are not available or because companies haven't published and disclosed them. The study focused on some corporate governance mechanisms, not all mechanisms.

Other limitations, the study focused only on financial aspects in analysis and ignored the operational aspects of the companies. The study is based on secondary data, because of the data collected from annual reports and other publications. This study covered only five fiscal years from 2013 to 2017. This short period is not enough to reflect the whole condition for companies.

Corporate governance in Palestinian companies mostly focuses on structures rather than practices, so the study results have limited power in practical implications.

5.3 Further Research

Anyway, this study contributes to encourage more research on corporate governance to raise awareness of companies on this subject and its importance especially in Palestine, and add to the literature on corporate governance practices.
Also, it provides an understanding about corporate governance mechanisms. This study can provide some guidelines for other less developed countries.

This study provides the opportunity for other researchers to study the impact of other governance variables on performance. So, it is suggested that other research could be broader in order to evaluate effects of more corporate governance mechanisms on firms’ financial performance. Also, they should pay attention to endogeneity in the corporate governance performance.

While this research focuses on five years from 2013 to 2017, this opens the door to future researches for a longer period; longer study period enhances quality of future research and provides more effective and realistic results.

Finally, the study recommends further research to study the impact of other factors of governance on financial performance especially in developing countries such as Palestine.
References


