

Investigating the Influence of Corporate Governance on Listed Companies Performance: Evidence from the Palestine Stock Exchange

Raed Abueid¹, Ibrahim Muhammad Adam², Mukhtar Danladi Galadima³

Abstract

The purpose of this study is to determine the relationship between corporate governance and return on equity (ROE); to examine the relationship between corporate governance and return on assets (ROA); and to analyze the relationship between corporate governance and earnings per share (EPS). To achieve the objective of the study, Fixed and Random Effect Models were employed to analyze the data. The findings revealed a negligible relationship between corporate governance and firm performance. However, when the study is controlled for financial leverage and total assets, a significant relationship between corporate governance and firm performance has been found. The practical implication of the results is that listed firms in Palestine should pay significant attention on enhancing the application of CG principles, uphold and ensure the board's commitment to its responsibilities, and ensure that adequate disclosure procedures are in place including the evaluation mechanism used for assessing the performance of the board. Based on the findings, the study recommends that listed firms in Palestine should pay significant attention on enhancing the application of CG principles so as to better protect shareholder rights; uphold and ensure the board's commitment to its responsibilities; and ensure that adequate disclosure procedures are in place including the evaluation mechanism used for assessing the performance of the board, its committees, and individual directors. Likewise, improving good CG practice should offer investor safety, reduce risk investment and sustain positive relationships between the company and its stakeholders which could result in higher growth in stock costs. It also recommends to the Palestinian Capital Market Authority (PCMA) to issue a stricter enforcement of CG legislation with special measures to be taken against those evading them.

Keywords: Corporate governance, firm performance, fixed and random effect models, Palestine stock exchange.

Author Affiliation: ¹Department of Accounting and Finance, Al-Quds Open University, Palestine.

²Department of Economics & Development Studies, Faculty of Arts & Social Sciences, Federal University Dutse, P.M.B. 7156, Jigawa State, Nigeria

³Department of Economics & Development Studies, Faculty of Arts & Social Sciences, Federal University Dutse, P.M.B. 7156, Jigawa State, Nigeria.

Corresponding Author: Raed Abueid, Department of Accounting and Finance, Al-Quds Open University, Palestine.

Email: rabueid@qou.edu

How to cite this article: Raed Abueid, Ibrahim Muhammad Adam, Mukhtar Danladi Galadima. Investigating the Influence of Corporate Governance on Listed Companies Performance: Evidence from the Palestine Stock Exchange, *Journal of Management and Science*, 11(2) 2021 15-24. Retrieved from <https://jmseleyon.com/index.php/jms/article/view/467>

Source of support: Nil

Conflict of interest: None.

Received: 4 May 2021 **Revised:** 6 June 2021 **Accepted:** 8 June 2021

1. INTRODUCTION

The worldwide spread of globalization, the conflict between company management and stockholders (agency theory results), and global financial scandals as well as the financial crises that took place in Asia in 1998 and in the USA during the third quarter of 2008 have all devastated the global financial markets. This devastation and its ramifications on the global market have highlighted the need to protect the international economy and investor interests from upheavals and maintain investor confidence in the economy. As a result, governments, policy makers, and economic scholars have since been trying to find solutions to protect investor (stakeholder) interests from market fluctuations. Corporate governance (CG) is one area that has been rigorously targeted for reform. The term corporate governance was coined only 40 years ago, and yet it is common within academic literature, practitioner discourse, and the media^[1]; CG has become a pivotal subject of discussion in the last 20 years as efforts are made to actively include and ensure the satisfaction of all stakeholders in corporate management. Moreover, corporate governance also refers to the system working for the achievement of goals and objectives of an organization and the management of relationship among its stakeholders. Correspondingly, across both more

and less economically developed countries, governments are increasingly setting up measures to guarantee that corporations optimize their chance for survival and success by adhering to international CG standards.^[2] These steps are often in response to calls by universal entity such as the Organization of Economic Cooperation and Development (OECD) and the World Bank, which promote commitment to standardized CG standards and offer their own CG guidelines. According to the^[3], there are a number of fundamental elements needed for firms to implement CG principles, counting acknowledgment of investor rights and possession capacities, impartial treatment of investors, dynamic job of partners in CG, and disclosure policies along with other organizational mechanisms to ensure transparency. Such elements ultimately enable the global business community to tackle fraud and corruption, defend stakeholder interests, and strengthen confidence in the financial system worldwide. Governance is increasingly defined by enterprise network regulators and capital marketplace authorities as an essential force behind company overall performance.

The Palestinian Authority strives to protect the national financial system and as such the capital market authority of Palestine defines CG within Palestinian firms. Implementation

of CG practices offers firms increased right of entry to global equity markets.^[4] However, CG in Palestine is still in the early stages of development compared to Western and international standards. Additionally, the literature available on CG within Palestine remains constrained. This research in essence aimed at making a significant contribution to research of global CG practices by concentrating on the contribution and impact of corporate governance to the Palestine listed firms financial performance.

Though previous research has explored the Palestinian context, focusing on CG practices and their effect on overall corporate performance,^[5,6,7,8] these papers analyzed the application of CG in a context in which political instability and agency conflicts are very high, and ownership structure is different from those of other developing and emerging economies. These are elements hitherto uncovered by recent research on Palestine. Policymakers, particularly the Palestinian Capital Market Authority (PCMA), as well as boards of administrators and audit committees will undoubtedly benefit from the findings of this study that elucidates both the strengths and limitations of the cutting-edge CG code currently operating in Palestine. By highlighting the issues presently facing Palestinian firms in terms of CG practices, the study will, furthermore, be of relevance to other stakeholders including regulators, teachers, the Corporate Governance Institute, companies indexed in the Palestine Securities Exchange (PSE) as well as policy makers in other Middle Eastern nations with comparable financial environments. Specifically, it may assist in controlling and evaluating the level of CG practice within Middle-Eastern international locations, mainly Palestine. Finally, this study is of relevance to the study of how CG principles and practices impact firm performance and may, thus, be useful for future research on this topic.

The main thrust of this study is targeted at the Palestine's stock market which is not yet fully developed to monitor the extent to which CG has advanced within those companies listed in the PSE and empirically evaluating the relationship between CG practices their financial performance. Hence, the study posed to provide answers to the following questions: Does CG impact on PSE-listed firms' financial performance, and what is the relationship of CG to the firm's performance after controlling for financial leverage and total assets of the firms; with an aim to determine the relationship between corporate governance and firm performance (ROE, ROA, and EPS) of listed companies on the Palestine stock exchange. Therefore, the specific objectives include:

- i. To determine the relationship between corporate governance and return on equity (ROE);
- ii. To examine the relationship between corporate governance and return on assets (ROA); and
- iii. To analyze the relationship between corporate governance and earnings per share (EPS).

The paper is organized into five parts, namely introduction; review of related literature comprising discussions about the Palestinian environment, corporate governance in Palestine, hypothesis development, theoretical foundation and empirical reviews of the existing studies; the methodology for achieving the objective of the paper; results and analysis; and lastly, concluding remarks of the paper.

2. Literature review

2.1 The Palestinian Environment

The Israeli occupation of Palestine has historically applied policies that smother the Palestinian financial system and force dependency on an occupation economy. Concessions have,

however, been made in the course of peace treaties between Palestinian and Israeli authorities, after which the Palestinian economic system became freer and numerous businesses were established. Services available to the public have since burgeoned, many supported by funding from the international community as well as remittances transferred back by migrant workers abroad and by those in Israeli employment. After the signing of the Paris Protocol in 1994, unemployment rates declined considerably: According to the World Bank, in 1996 unemployment rate was 28%, while three years later it had been reduced to around 11%.

In 1997, the establishment of the PSE offered public shareholdings that made long-term financing more feasible. There are currently 48 companies listed in the PSE ranging a variety of sectors including Services, Insurance, Industry and Investment.

2.2. Corporate Governance in Palestine

The administration structure for cash related law and supervision in Palestine falls under the jurisdiction of the going with government entities: the Palestinian Monetary Authority (PMA) and the Palestinian Capital Market Authority (PCMA). The PMA was established in 1995 as an unbiased open substance instructed to keep up the stability and effectiveness of the Palestinian economy using cautious rule and supervision with regards to worldwide standards and practices. The PCMA is the single specialist responsible for checking the PSE's trading activities and coordinating the lead of the recorded groups and business corporations with PSE membership. While overall the PSE performs increasingly well, its potential remains undiscovered as it continues to neglect to meet expectations, highlighting the prerequisite for sizable reforms.

The PCMA's code addresses five essential elements of the survey leading body of trustees: general advisory gathering meetings, shareholders' great rights, corporate administration, assessing, and disclosure and transparency. The fitting elements in the PCMA code fuse the going with: the code calls for the top administrative staff in open shareholding companies to have somewhere in the scope of five and 11 participants; the code recommends having board directors as autonomous contributors; the code recommends that the board boss not be locked in with the association's legitimate functions; and, the code calls for shareholders to select the outside auditors in the midst of their yearly assembly based on admonishment from the overseeing body and the survey chamber, and to support their charges. The outside auditors should be ensured, honest to their clients, and possess satisfactory professional skill for the obligations required (Hassan and Hijazi, 2015).

The motivation behind such obligations is the enforcement of Palestine's codes of CG. In order to optimize the performance and value of Palestinian firms, notably those listed on the country's stock exchange, it is necessary to ensure stricter regulation. Low market performance and poor governance remain significant challenges to policy makers and buyers: They undermine buyer confidence in the honest pricing of shares and self-belief inside the PSE, which ultimately leads to the PSE's low level of liquidity. Thus improvement of CG among PSE listed firms is intended to bring about greater interest from international investors. Few studies have been conducted into the challenges facing Palestinian firms in terms of CG.

However, the Institute for Palestinian Economic Policy Studies MAS made an interesting finding, namely that the compliance of listed businesses with the average corporate governance index (CGI) is higher than that of unlisted agencies. ^[9]

Hassan et al. ^[10] in the article entitled as 'the influence of corporate governance on corporate performance: evidence from Palestine' analyzed the annual reports of the non-financial companies listed in the Palestine Stock Exchange during the time period from 2010 to 2012. Using the agency theory, their analysis revealed that the corporate performance and the corporate governance are negatively associated with each other, owing to the infancy stage of corporate governance in Palestine.

Prior to the Second Intifada that began in September 2000, the customs union between Israel and the Palestinian Authority (PA) kept Palestine's trading relations limited to Israel alone. Approximately 85% of foreign exchange within Palestine was processed through Israel, and a quarter of all working Palestinians were employed by Israeli corporations. ^[13] The subsequent six years of escalated warfare in Palestine devastated the Palestinian economy as a result of new regulations that prevented Palestinians from working in Israel; Israel's failure to transfer clearance revenues due to the PA; and restrictions imposed on the movement of both goods and people throughout the West Bank and Gaza. All these developments negatively impacted the Palestinian economy and accelerated the rates of unemployment and poverty.

Following public elections in 2006 the economic disaster worsened. Donors did not cover the PA's budget, rendering the PA unable to pay employee salaries. The country's real GDP is estimated to have fallen by five to 10 percent in 2006, and unemployment and poverty rates were soaring at 40% and 65% respectively. Palestinian firms were unable to keep up the import and export of goods as a result of the occupation ^[14], meaning that no direct foreign investment in real estate or short-term trading could be processed.

2.3. Hypothesis Development

Keeping in view the results of previously done studies, particularly the one conducted by Hassan et al ^[15], since it provides the most relevant literature for this study, the following hypotheses have derived:

Hypothesis 1: Corporate governance and return on equity (ROE) in the companies listed on Palestine Stock Exchange (PSE) have a positive relationship between them.

Hypothesis 2: Corporate governance and return on assets (ROA) in the companies listed on Palestine Stock Exchange (PSE) are positively linked with each other.

Hypothesis 3: Corporate governance and earnings per share (EPS) in the companies listed on Palestine Stock Exchange (PSE) share a positive relationship.

2.4 Theoretical Foundation

There are two key theories of governance that can elucidate the relationship between CG and company performance: the resource dependency theory and agency theory. Both are discussed separately in the following section:

a. Resource dependency theory

Resource dependency theory analyses how organizations access resources from their external environment such as knowledge, raw materials and capital, and how the accessibility of these resources influences organizational behavior. Multiple studies have argued that a board of directors that possesses or has access to adequate resources will positively impact firm performance. ^[16,17] Specifically, Kiel and Nicholson ^[18] claim that having a director with significant expertise and a strong professional network can be

a critical for a company to gain financial and human capital, access new business opportunities and develop its political connections. Independent administrators might therefore endeavor to make resources more affordably accessible for the sake of improving a firm's financial performance.

b. Agency theory

Agency theory asserts that company management is defined by the conflict of interest between owners and agents. ^[19] Managers are often perceived to be managing a business in line with their own personal interests instead of to serve those of the shareholders, ^[20] thus rendering them untrustworthy and unreliable from a shareholder viewpoint despite excellent skillsets and expertise. CG can act as a powerful counterweight to the agency problem whilst maintaining the established order of board.

Both the above mentioned theories relate to this study in such a way that it needs to investigate the influence of corporate governance on listed companies performance in the Palestine Stock Exchange (PSE). Thus, one of them covers the access of an organization to the external resources and their impact on organization behavior; and the second one describes the conflict of interest among a company's stakeholders.

2.5 Empirical Review

Extensive research has been conducted to determine how a firm's CG scores – a rating of a company's CG practices – relates to its overall performance. Using the annual reviews of 1,868 U.S. firms, Brown and Caylor ^[20] developed a CG score and proved that this score correlated substantially and undoubtedly with Tobin's Q, a trademark of company performance. Siagian et al. ^[21] conceived a CGI to assess CG practices within Indonesian businesses, as well as a reporting satisfactory index (RSI) to evaluate companies' rate of reporting and disclosures. The study reveals significant associations between CG and exclusive proxies of company fees.

Generally, proper CG practices are considered and have been proven to enhance overall firm performance across a variety of firms and locations. ^[22,23,24] In particular, CG has been shown to correlate positively with both market valuation and return on assets as per a study that focused on 374 companies across 14 countries using the CLSA governance index. ^[25] Positive CG practices have been furthermore positively linked to market valuation, as evaluated by Tobin's Q, in a study by Black et al. ^[26], whose CGI comprising 515 Korean agencies was based on a survey carried out by the Korea Stock Exchange. A similar relation between CG practices and marketplace valuation was highlighted in Black's ^[27] study of 21 Russian companies. Çipi, Llacib and Ferreira ^[28] found that the application of "desirable" CG practices enables businesses' to strengthen their overall long-term monetary performance and attract highly effective foreign buyers. Enhanced CG practices could moreover avert crisis for the financial markets, according to Tekera and Yüksel ^[29], who also underlined the critical role of the CGI in facilitating the control of firm's compliance with CG principles by investors. In a study drawing on data from companies listed in the Hong Kong Stock Exchange, Cheung et al. ^[30] explored the extent to which CG influences a firm's market value. The authors developed a CGI using OECD's principles of corporate

governance. [31] The CGI scores of those companies included in the study indicate great diversity in the quality of CG practices implemented including some of very high quality. The study concludes that a firm's CGI score undoubtedly affects its market value, and that its transparency as regards this score reinforces this correlation. The association between CGI and corporations' profitability is given essential attention in company governance studies; however, findings are inconsistent. Some research argues that businesses that are better governed are likely to run more efficiently and thus enjoy a more predictable cash flow. [32] Brown and Caylo [33] found that every measure they used to assess company profitability had a positive correlation with corporate governance quotient (CGQ) ratings. In a study that assessed the return on property as a means of evaluating overall performance, Klapper and Love [34] demonstrated that corporations with greater CG enjoy increased running performance. Based on their findings, Wahyudin and Solikhah [38] claimed that the CG score of Indonesian public agencies has a direct impact on their financial performance, inclusive of return on assets (ROA), return on equity (ROE), and earnings per share (EPS). Ownership concentration, an element of CG, has specifically been shown to bear influence on the ROA, ROE, and EPS of non-financial organizations in Pakistan [34]. On the other hand, a number of studies present findings to the contrary. Shahwan's [35] research, for example, claims no evidence of a relationship between CG practices and firm performance. Being at risk of financial distress is furthermore only weakly related to CG practices. [36,37,38] To measure company performance and then evaluate its relation with CG, researchers have used standards which include return on assets (ROA), return on equity (ROE), and income in line with share (earnings per share; EPS;). [39]

3. Data and Methods

3.1 Data: Types and Sources

Both primary data (being the first hand data from the individuals directly) as well as the secondary data from the online sources were employed in this study. The data on corporate governance (CG), return on equity (ROE), return on assets (ROA), earnings per share (EPS), financial leverages (FINLEV), and total assets (T_Assets) for the period 2006, 2013, and 2017 for the Palestine companies listed in the Palestine Securities Exchange (PSE) were tracked down from two main sources. Return on equity (ROE) calculates the return per owner dollar invested (Financial Decision Making, 2015). It can be calculated by the following formula:

Return on Equity = $\frac{\text{Net Income}}{\text{Financial Reporting and Analysis, 2012}}$

Average Total Equity

Return on assets (ROA) determines profitability relative to funds invested in the company by preferred stakeholder, common stakeholders and the suppliers of debt financing (Financial Reporting and Analysis, 2012). Following formula is used to calculate it:

Return on Assets = $\frac{\text{Net Income}}{\text{Financial Reporting and Analysis, 2012}}$

Average Total Equity

However, ROE will always be greater than ROA. Earnings per share (EPS) refer to the profitability of a company. The higher the profitability of a company, the higher are its earnings per

share. The method to calculate EPS is to divide the company's net income with its total number of outstanding shares. Data on financial performance indicators (ROA, ROE, and EPS), total asset, and financial leverage were sourced from the prospective firms' annual records and PSE website. The sample for the study includes all 48 companies listed on the PSE. The study considered only those companies with an annual data for the years 2006, 2013, and 2017. The major reason behind choosing only these three years to obtain and analyse data is that only the studies conducted in the years 2006 and 2013 obtained the similar measurements as that of the studies conducted in 2017. Moreover, it has also been acknowledged that research in developing countries often struggles to acquire good sample sizes. However, out of the 48 listed companies, foreign companies in the PSE, those companies that are not active in the markets and banks were all excluded from our study's sample. Accordingly, the final number of firms included in the sample was 32, owing to their relevance with the variables of the study. Meanwhile, there was negligible data on CG for the listed firms, either presented in their annual report or on website. Therefore, this study relied on the CG index for the Palestine listed companies in the study of Qabbja [40] who computed the index for year 2006, and Abu Snainah [41] who similarly computed the index for year 2013. However, the CG index for year 2017 was computed in this study by using questionnaire adapted and modified from OECD. [42] Accordingly, the questions in the questionnaire comprises of five groups, with each pertaining to a key element of the OECD principles: rights of shareholders, impartial treatment of shareholders, employment of stakeholders, disclosure and transparency, and board responsibilities. Importantly, the OECD principles have been conceived with the intention that they be adapted to suit different geographical, social, political, and cultural circumstances across the world. The procedure adopted in this study is similar to the method employed in previous studies that aimed at constructing corporate governance index. [43] The questionnaire was administered to those personnel (managers, board members, audit committee members, internal auditors, and accountants) that were identified in the previous studies (e.g., Goodwin and Seow; Okpara; Solomon et al.; Yassin, Ghanem, and Rustom) as a group of respondents that are most relevant to corporate governance. This group of respondents is opined to be involved in their respective firms' CG and financial operations.

The CGI was made up of 39 assessment criteria in line with the OECD principles of CG. The 39 criteria were divided into five different categories: shareholder rights (nine questions), equitable treatment of shareholders (six questions), role of stakeholders (six questions), disclosure and accountability (nine questions), and responsibilities of the board (nine questions). The respondents provided answers based on a 5-point Likert scale, in which 5 indicates the highest degree of compliance and 1 represents the lowest level of compliance.

Selection of respondents was achieved by way of the probability sampling technique to guarantee an equal chance of selection to all members of the population, and information regarding the respondents was taken from the 32 listed companies in our sample. Five respondents from each firm were chosen. The random sample therefore comprised 160 potential respondents. After several follow-up procedures, the study obtained 152 valid responses from the participants, representing a response

rate of 95%.

The reliability of the measurement instrument was determined and Cronbach alpha of >0.8 indicate the reliability of the instrument. Subsequently, the corporate governance index was generated using principal component analysis (PCA) for the four sectors included in the study sample.

3.2 Methods

Pooled OLS was employed since the sample selected for each year (i.e. 2006, 2013, and 2017) of panel data, was different. Evaluated Pooled OLS condition was written and well structured. The strategy for Pooled OLS checks was to bind the entire of squared residuals. The evaluated parameters were picked, meanwhile, to make aggregate of square residuals as pitiful as could be allowed [42]. The surveyed Pooled OLS fall away from the faith is made as looks for after:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \varepsilon(1)$$

where, β_0 is the estimate of constant, and β_1 are the estimate of slopes correspond to each explanatory variable.

Since panel data is a mix of cross territory and time game plan data, therefore, it may have cross sectional effects, time impacts or both. The effects are either fixed effect or self-assertive effect. In fixed effects model, it is alluring to acknowledge difference in catches transversely over cross sectional or time game plan, while in sporadic effect model is more to explore about the refinement in bungle contrasts. In fixed effect model, there are two distinct approaches to do estimations which are inside effect and between effect estimation. The estimators produce vague inclination of non-trick self-governing elements yet they produce particular parameter measures [42]. Between procedures is isolated into two, to be explicit among times and between social occasion estimators. Fixed effect and Random effect model are shown in (2) and (3) condition as seeks after:

$$Y_{it} = (\alpha + i) + X_{it}\beta + Vit(2)$$

$$Y_{it} = \alpha + X_{it}\beta + (i + Vit)(3)$$

where Y_{it} =dependent variable, X_{it} =independent variables, Vit =zero mean random disturbance with variance, i =an unobserved individual specific effect, and β = model coefficient.

Random effect model examinations how cross a locale comparatively as time methodology influence the lurch change. The random effect model is sensible for n individuals (cross sectional units) which are drawn unusually from extensive masses. Fixed effect models treat differences of individual express effect; it in gets and it perceive same assessment and reliable changes across over cross sectionals. Since individual unequivocal effect is time invariant, the study allowed to be associated with other free factors [41], while sporadic effect models predict catch and propensity as an eager. The random effect models treat partitions of individual express effect in mess up capability.

Our panel data involves repeated observations of a set of Palestinian firms across four sectors (Investment, Service, Insurance, and Industry) over three years (2006, 2013, and 2017). As such, there may be unobservable firm-specific effects, time-invariant effects, and time trends that may affect our endogenous variables. Using OLS regression to estimate the covariates, thus, may yield biased estimates due to unobserved heterogeneity. To handle these issues in our analysis, the study estimated both fixed effects and random effect, and employed Hausman test to confirm the most appropriate results for our study.

In this study, two models were estimated; the first model is CG together with each performance measure included in this study,

while the second model includes the CG together with the control variables (financial leverage, and total assets) against each of the performance measures. Owing to the fact that all the variables were measured in percentage ratio except the total assets, the variables were transformed into natural logarithm before the empirical analysis. The equations for each model are described below:

Model 1:

$$\text{Performance measure (ROE, ROA, and EPS)} = \beta_1CG_{it} + \alpha_i + \text{uit}(4)$$

Model 2:

$$\text{Performance measure (ROE, ROA, and EPS)} = \beta_1CG_{it} + \beta_2T_Asset_{it} + \beta_3\ln Finlev_{it} + \alpha_i + \text{uit}(5)$$

where α_i ($i = 1 \dots n$) is the unknown intercept for each firm (n firm-specific intercepts) and uit is the error term.

4. Empirical findings and discussion

4.1 Descriptive analysis

The descriptive analysis of the variables as presented in Table 1 indicates that the mean value for ROA for the period sampled is 0.03, with a maximum value of 0.06 and minimum value of -0.01. Though the standard deviation is very small which indicate that there is a less degree of variation among the sector included in the sample. The ROE is almost similar to ROA, but with a slight difference. Though, the mean value is of the same, but the maximum and minimum values are 0.15 and 0.04 respectively, while the standard deviation stood at 0.15. The statistics for earnings per share (EPS) has 0.13 as the mean value, 0.49 (maximum value), and -0.34 and 0.21 for minimum value and standard deviation value respectively. The negative sign for minimum value for ROA and EPS is an indication that some of the listed companies are having poor performance. The corporate governance statistics indicates that while the mean value is 49.31, the maximum and minimum values are 60.91 and 31.26 respectively. Meanwhile, the high value of standard deviation (8.66) is an indication of a high degree of variations among the firms in terms of corporate governance.

Moreover, financial leverage statistics described that the mean value is 0.39, and maximum, minimum and standard deviation value are 0.74, 0.09, and 0.19 respectively. Lastly, as depicts in Table 1, it shows that within the period observed, the mean total assets for the listed companies stood at 93,945,163, maximum total assets was 213 million, while the minimum value for total assets is 21.8 million.

Table 2 displays the correlation analysis which shows strong correlations between financial performance indicators ($R > 0.6$). However, this is not something to be concerned about because the study estimated each financial indicator in a separate model. While, with regards to the explanatory variables the results show the correlation ranged between -0.03 and -0.46 which are rather small and again indicates that multicollinearity is not an issue among the independent variables. The correlations are rather very low and this indicates a lack of multicollinearity problem meaning that all the variables can be taken into the subsequent regression analysis. The general guideline Gujarati (1999) is that correlation coefficients should not be above 0.80 where multicollinearity could become a serious problem.

4.2 Hypotheses testing

The result of hypothesis one, two, and three as depicts in Table 3 which was to determine the relationship between corporate governance (CG) and return on equity (ROE). The analysis result from both fixed and random effect model are summarized in the table reveals that, while the Hausman test shows that random effect model is most suitable for the analysis of hypothesis one, and fixed effect is best suited for hypothesis 2 and 3, the result indicates that as far as the Palestine listed companies are concerned, the relationship between corporate governance and firm's performance (ROE, ROA, and EPS) could not be established. Therefore, since the p-value for all the coefficients obtained are greater than 0.05, the study failed to reject the null hypothesis and conclude for hypothesis 1, 2, and 3 that there is no significant relationship between corporate governance and firm performance. The results found in this study is in consistence with studies of Bauer et al; Beiner et al; and Shawna's, among other previous authors who found no relationship between corporate governance and firm performance.

Table 4 shows the result for model two where financial leverages and total assets were added to the model as a control variable in determining the relationship between corporate governance and firm performance. For hypothesis 4, the influence of corporate governance, financial leverage and total assets on ROE was analyzed and results as summarized in Table 4 shows that between the two analyses, Hausman test confirmed the appropriateness of fixed effect model. The result as presented in Table 4 reveals that corporate governance has a negative relationship with return on equity (ROE). The relationship was found to be significant at 5% confidence level. Meanwhile, financial leverage was found to have positive relationship with Palestine listed companies performance, which is statistically significant at 10% confidence level.

Moreover, a total asset was found to have negative and statistically significance relationship with return on equity of the listed companies in Palestine. However, with the R-squared value of (0.69), and f-statistic (0.24), the joint contributing influence of corporate governance, financial leverage, and total assets could not be established. Therefore, in respect of hypothesis 4, the study rejected the null hypothesis and conclude that after controlling for financial leverage, and total asset, there is significant relationship between corporate significance and return on equity (ROE).

Similarly, the relationship between the dependent variable (ROA), independent variable (CG), and the two control variables (Finlev, and Int_assets) were examined (H5), the Hausman test result as presented in Table 4 shows that fixed effect model is best suited for the analysis. The analysis found negative significant relationship between corporate governance and return on assets. Positive relationship between ROA and Finlev, and negative significant relationship between ROA and Int_assets were found. Meanwhile, R-squared of 0.84 indicate that about 84% of the explanation variation in return on assets could be provided by the combination of CG, finlev, and Int_assets, but its significance could not be established.

Furthermore, hypothesis 6 (H6) was stated to determine the significance of the relationship between EPS and CG after controlling for finlev, and Int_assets. The analysis result as summarized in Table 4 shows that CG and Int_assets were found to have a negative significant relationship with EPS. From the analysis above, study rejected the null hypothesis for both

hypothesis 4 and 5, and conclude that there is significant relationship between corporate governance, and ROA and EPS after controlling for financial leverage and total assets. Our findings from this study which shows a negative significant relationship between corporate governance and firm performance is in contrast to previous like Hodgson et al. Siagian et al. Wahyudin and Solikhah, who in their studies established a positive impact of corporate governance on overall firm performance. However, the negative influence could be that some of the board of directors of the listed companies in Palestine do not possess or has access to adequate or significant expertise. This is in agreement with Haniffa and Hudaib; Kiel and Nicholson, who in their studies opined that only board of directors with requisite expertise and adequate resources, could ensure positive influence of governance on firm performance.

4.3 Robustness Check

Econometricians note that OLS standard errors are biased when the residuals are correlated. In panel data residuals for a firm could be correlated across years or across the sample firms. Wooldridge suggested considering the robustness of the estimated relationships using alternative standard error estimation methods. Petersen notes In the presence of a fixed firm effect OLS standard error estimates are biased down significantly. Meanwhile, clustered standard errors estimation method which accounts for clustering by firm produce unbiased estimation. Our results using clustered standard errors as robustness check were qualitatively similar to those in Table 4. This suggests that our result is robust against residuals correlation.

5. Conclusion and Recommendations

This research intended to shed light on the extent to which corporate governance (CG) compliance impacts firm performance among Palestinian companies listed in the Palestine Stock Exchange (PSE). The basis of our study was secondary data, complemented with the primary data collected via specifically designed questionnaires. Responses to these questionnaires represented the perceptions of the various stakeholders from each company in the sample in regards with CG compliance within their respective firms as a data for CG (year 2017). It is clear that CG principles in the five areas identified by the OECD [28] are being applied among the Palestinian firms. This study, however, differs from other such studies in such a way that unlike those studies, it provides a variety of variables against which the data needs to be measured. Moreover, it has also collected and analyzed secondary data in addition to the primary data with the help of a well-established questionnaire.

However, the study failed to reject the null hypotheses of hypothesis 1, 2, and 3, and conclude that there is no relationship between corporate governance and firm performance. But when control variables (financial leverage, and total assets) were added to the model, the results were found to be significant, though it was negative. The study opines this negative sign of the relationship could be as a result of the not-too-long compliance of the listed companies in Palestine on practicing corporate governance.

Based on the findings, the study recommends that listed firms in Palestine should pay significant attention on

enhancing the application of CG principles so as to better protect shareholder rights; uphold and ensure the board's commitment to its responsibilities; and ensure that adequate disclosure procedures are in place including the evaluation mechanism used for assessing the performance of the board, its committees, and individual directors. Likewise, improving good CG practice should offer investor safety, reduce risk investment and sustain positive relationships between the company and its stakeholders which could result in higher growth in stock costs. It also recommends to the Palestinian Capital Market Authority (PCMA) to issue a stricter enforcement of CG legislation with special measures to be taken against those evading them.

This study faced limitations in quantitative data sample size. Furthermore, the study period was also restricted to the years of 2006, 2013, and 2017. Our findings may not be applicable to firms that do not fit the criteria the study applied to our sample, that is to say non-listed and state-owned enterprises or organizations outside of Palestine. Moreover, it's also an acknowledged fact that acquiring a good and desired research sample size in the developing countries requires a lot of struggle by the researcher (Weekes-Marshall, 2014). However, our study, in particular, lacks the breadth of view points that might have been achieved by

the inclusion of additional stakeholders interested in CG such as regulators, investors, overseas corporate partners or purchasers.

For future research, it would be worthwhile to include both non-listed companies and state-owned businesses in the study so as to render the sample more substantial in size. In addition to this, a useful avenue for further research would be supplementary empirical study to the extent to which agency theory can be reasonably applied in the context of developing countries. In order to assess how far the study can generalize the findings of the present study, it would be interesting to conduct a similar study of the impact of CG compliance on firm performance particularly in other developing market contexts. Such research could take into account additional country-level factors – as opposed to or as well as company-level factors – as variables so as to be able to develop models that represent CG practice in the context of developing countries. Future research could also use alternative methodologies, such as semi-structured interviews with members – to explore how board and audit committee characteristics impact firm performance.

Table 1: Descriptive statistics of variables

Statistics	ROA	ROE	EPS	CG	FINLEV	T_ASSETS
Mean	0.03	0.03	0.13	49.31	0.39	93945163
Max.	0.06	0.15	0.49	60.91	0.74	
Min.	-0.01	0.04	-0.34	31.26	0.09	21859100
Std.Dev	0.02	0.15	0.21	8.66	0.19	61609791

Source: Researcher's Computation

Table 2: Correlation matrix

	ROA	ROE	EPS	CG	FINLEV	T_ASSETS
ROA	1					
ROE	0.68	1				
EPS	0.78	0.82	1			
CG	-0.21	-0.38	-0.43	1		
FINLEV	-0.03	-0.14	-0.03	-0.14	1	
T_ASSETS	-0.46	0.03	-0.29	-0.44	-0.25	1

Source: Researcher's Computation

Table 3: MODEL 1

Dep. Variable	Ind. Variable	Test	Coeff.	R Squared	F- Statistics	Hausman Test (Chi-Sq Stat.)
ROE	CG	FE	-0.01 (0.01)	0.30	0.74	0.76
		RE	-0.01 (0.01)	0.14	1.64	
ROA	CG	FE	-0.001 (0.001)	0.46	1.52	2.85***
		RE	0.001 (0.001)	0.05	0.55	
EPS	CG	FE	-0.02 (0.01)	0.65	3.20***	7.61*
		RE	-0.01 (0.01)	0.19	2.31	

Source: Researcher's Computation

Note: (a) Values in Parentheses are standard error

(b) *, **, *** Denotes 1%, 5% and 10% significance level respectively

Table 4: MODEL 2

Dep. Variable	Ind. Variable	Fixed Effect	Random Effect	Hausman Test (Chi-Sq Stat.)
ROE	CG	-0.03 (0.02)	-0.01***(0.01)	6.92***
	Finlev	1.76***(0.79)	-0.21 (0.21)	
	Int_assets	-1.30***(0.56)	-0.06 (0.06)	
R Squared		0.69	1.81	
F- Statistics		0.24	0.88	
ROA	CG	-0.01*(0.001)	-0.002**(0.001)	9.81**
	Finlev	0.18***(0.09)	-0.03 (0.02)	
	Int_assets	-0.21**(0.06)	-0.03*(0.01)	
R Squared		0.84	4.61**	
F- Statistics		0.55	3.22***	
EPS	CG	-0.04***(0.02)	-0.02**(0.01)	2.47
	Finlev			
	Int_assets	1.14 (0.99)	-0.29 (0.26)	
		-1.04 (0.70)	-0.22**(0.07)	
R Squared		0.76	2.58	
F- Statistics		0.63	4.64	

Source: Researcher's Computation

Note: (a) Values in Parentheses are standard error

(b) *, **, *** Denotes 1%, 5% and 10% significance level respectively

Acknowledgments

We thank almighty God for giving us the strength to start and complete this paper.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Conflict of Interest:

We the authors, declared that we have no conflict of interest.

References

1. D. Denis, "Twenty-five years of corporate governance research and counting", *Review of Financial Economics*, [http://dx.doi.org/10.1016/S1058-3300\(01\)00037-4](http://dx.doi.org/10.1016/S1058-3300(01)00037-4), 10(3) (2001) 191-212.
2. J. Duke, K.A. Kankpang, "Linking corporate governance with organizational performance: New insights and evidence from Nigeria", *Global Journal of Management and Business Research*, 11(12) (2011) 47-57.
3. Organization for Economic Co-operation and Development (OECD), "The OECD Principles of corporate governance": OECD Publications Service, France, (2004).
4. N. Abdelkarim, "The Linkage between the Degree of Compliance with Corporate Governance Rules and Profitability: Evidence from Palestine Exchange Listed Firms", *Journal of Management Research*, 9(1) (2017).
5. G. Abu Snainah, "The Impact of the Commitment in Application of the Rules of Palestinian Corporate Governance on Financial Performance for Listed Companies on the Palestine Exchange", Master Thesis, Hebron University, Palestine, (2014).
6. N. Abdelkarim, S. Alawneh, "The relationship between performance and corporate governance and the performance of Palestinian firms: an empirical study", *The International Journal of Business and Finance Research*, 3(2) (2009).
7. N. Abdelkarim, K. Ijbara, "Evidence on Corporate Governance Compliance By Palestine Securities Exchange Listed Firms", *Global Journal of Business Research*, 4(3) (2010).
8. A. Qabbja, "The Impact of Corporate Governance Effectiveness on Financial Performance for Listed Companies on the Palestine Securities Exchange", PhD thesis, Amman Arabic University, Jordan, (2008).
9. A. Kabaja, "Enhancement of Corporate Governance in Palestine", the Palestine Economic Policy Research Institute MAS, Ramallah, Palestine, (2008).
10. Y. Hassan, "The influence of corporate governance on corporate performance: evidence from Palestine", *Afro-Asian J. of Finance and Accounting*, 6(3) (2016).
11. N. Abdelkarim, S. Alawneh, "The relationship between performance and corporate governance and the performance of Palestinian firms: an empirical study", *The International Journal of Business and Finance Research*, 3(2) (2009).
12. J. Pfeffer, "Size, composition, and function of hospital boards of directors: A study of organization environment linkage", *Administrative science quarterly*, <https://doi.org/10.2307/2391668>, (1973) 349-364.
13. R.V. Aguilera, I. Filatotchev, H. Gospel, G. Jackson, "An organizational approach to comparative corporate governance: Costs, contingencies, and complementarities", *Organization Science*, 19(3) (2008) 475-492.
14. O.E. Williamson, "Markets and Hierarchies: Analysis and Antitrust Implications". New York/London: Free Press. http://web.worldbank.org/archive/website01418/WEB/IMAGES/27_MONTH.PDF, (1975).
15. L.D. Brown, M.L. Caylor, *The Correlation Between Corporate Governance and Company Performance*, research study commissioned by Institutional Shareholder Services, Inc, (2006).
16. F. Siagian, S. Siregar, Y. Rahadian, "Corporate governance, reporting quality, and firm value: evidence from Indonesia", *Journal of Accounting in Emerging Economies*, 3(1) (2013) 4-20.
17. B.S. Black, I. Love, A. Rachinsky, "Corporate governance indices and firms' market values: Time series evidence from Russia", *Emerging Markets Review*, 7(4) (2006) 361-379.
18. S. Beiner, W. Drobetz, M.M. Schmid, H. Zimmermann, "An integrated framework of corporate governance and firm valuation", *European Financial Management*, 12(2) (2006) 249-283.
19. A. Hodgson, S. Lhaopadchan, S. Buakes, "How informative is the Thai corporate governance index? A financial approach", *International Journal of Accounting and Information Management*, 19(1) (2011) 53-79.
20. Organization for Economic Co-operation and Development (OECD), "The OECD Principles of corporate governance": OECD Publications Service, France, (2004).
21. B.S. Black, I. Love, A. Rachinsky, "Corporate governance indices and firms' market values: Time series evidence from Russia", *Emerging Markets Review*, 7(4) (2006) 361-379.
22. B. Black, "The corporate governance behavior and market value of Russian firms", *Emerging Markets Review*, 2 (2001) 89-108.
23. A. Cipi, S. Llaci, Ferreira Fernando, "Current situation of corporate governance practices in Albanian joint stock companies: a Delphi-based approach", *Procedia - Social and Behavioral Sciences*, 110 (2014) 841 - 851.
24. S. Tekera, A.H. Yüksel, "Stock Price Reaction for Scoring on Corporate Governance", *Procedia - Social and Behavioral Sciences*, 150 (2014) 985- 992.
25. Organization for Economic Co-operation and Development (OECD), "The OECD Principles of corporate governance": OECD Publications Service, France, (2004).
26. M.C. Jensen, W.H. Meckling, "Theory of the firm: Managerial behavior, agency costs and ownership structure", *Journal of financial economics*, [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X), 3(4) (1976) 305-360.
27. L.D. Brown, M.L. Caylor, *The Correlation Between Corporate Governance and Company Performance*, research study commissioned by Institutional Shareholder Services, Inc, (2006).
28. L.F. Klapper, I. Love, "Corporate governance, investor protection, and performance in emerging markets", *Journal of Corporate Finance*, 10(5) (2004) 703-728.
29. A. Wahyudin, B. Solikhah, "Corporate governance implementation rating in Indonesia and its effects

- on financial performance”,Corporate Governance: The International Journal of Business in Society,doi: 10.1108/CG-02-2016-0034, 17(2) (2017) 250-265.
30. A.N. Sheikh, Z. Wang, S. Khan,“The impact of internal attributes of corporate governance on firm performance evidence from Pakistan”,International Journal of Commerce and Management, 23(1) (2013) 38-55.
 31. R. Bauer, N. Guenster, R. Otten,“Empirical evidence on corporate governance in Europe:the effect on stocks returns, firm value and performance”, Journal of Asset Management, 5(2) (2004) 91-104.
 32. S. Beiner, W. Drobetz, M. Schmid, H. Zimmerman, “An integrated framework of corporate governance and firm valuation – evidencefrom Switzerland”,available at: www.wvz.unibas.ch/cofi/publications/papers/2003/09-03.pdf, (2004).
 33. A. Gompers, J.L. Ishii, A. Metrick,“Corporate governance and equity prices”, Quarterly Journal of Economics, 118 (2003) 107-55.
 34. Rostami Shoeyb, Rostami Zeynab, Kohansal Samin Kohansal, “TheEffect of Corporate Governance Components on Return on Assets and StockReturn of Companies Listed in Tehran Stock Exchange”, Procedia Economics and Finance 36 (2016) 137–146.
 35. A. Qabbja, “The Impact of Corporate Governance Effectiveness on Financial Performance for Listed Companies on the Palestine Securities Exchange”, PhD thesis, Amman Arabic University, Jordan, (2008).
 36. G. Abu Snainah, “The Impact of the Commitment in Application of the Rules of Palestinian Corporate Governance on Financial Performance for Listed Companies on the Palestine Exchange”, Master Thesis , Hebron Univesity , Palestine, (2014).
 37. Organization for Economic Co-operation and Development (OECD),“The OECD Principles of corporate governance”: OECD Publications Service, France, (2004).
 38. N. Yassin, M.G. Ghanem, L. Rustom,“The role of internal audit function in corporate governance: an empirical study on commercial banks in Lebanon, Beirut Arab University,WorkingPaperno.OC12069,<http://www.aabri.com/OC2012Manuscripts/OC12069.pdf>, (2011).
 39. O.E. Williamson,“Markets and Hierarchies: Analysis and AntitrustImplications”.NewYork/London:FreePress. http://web.worldbank.org/archive/website01418/WEB/IMAGES/27_MONTH.PDF, (1975).
 40. J.M. Wooldridge,“Cluster sample methods in applied econometrics”, Michigan State University working paper, (2004).
 41. J.M. Wooldridge,“Introductory econometrics a modern approach”, USA: South-Western Centage Learning, (2009).
 42. J.M. Wooldridge,“Introductory Econometrics: A Modern Approach”,Boston: Centage Learning, (2012).
 43. N. Yassin, M.G. Ghanem, L. Rustom,“The role of internal audit function in corporate governance: an empirical study on commercial banks in Lebanon, Beirut Arab University,WorkingPaperno.OC12069,<http://www.aabri.com/OC2012Manuscripts/OC12069.pdf>, (2011).