CHAPTER 5

RESULTS AND DISCUSSION

5.1 Introduction

This chapter involved both statistical analyses of the data obtained from the PEX electronic website and research on the statistical methods used for the analysis. These statistical analyses involved panel data regression models, i.e., Pooled OLS, fixed effect, and random effect models. These models were used to explore the association between EM and CG characteristics in Palestine.

The steps of the statistical methodologies used here were laid out in detail and chronologically. Hence, Section 5.2 explains the descriptive statistics of the data set, while correlation analysis is presented in Section 5.3. The regression analysis and the assumptions of conducting OLS regression models are elaborated upon in Section 5.4, and the role of estimation results are explained in Section 5.5. Meanwhile, additional analyses are presented in Section 5.6, while a chapter summary is presented in Section 5.7.

5.2 Descriptive Statistics

5.2.1 Descriptive Statistics of the Dependent Variable - EM

EM, which is the response variable of this analysis, has its distribution summarized in Table 5.1. EM was recorded 232 times for a total of 29 firms. Outlier(s) were present in the recording of EM as the maximum EM seems higher than the mean. This evidence of the presence of outliers is handled further ahead. The descriptive statistics tables consist of mean, standard deviation, and maximum and minimum

values. The results of the descriptive analysis are illustrated in Table 5.1. The absolute value of DAC (ABSDAC) for the firms in the study had a mean value of 0.0617 with a minimum value of 0.000 and a maximum value of 0.7639. The mean of ABSDAC in this study is consistent with some prior research like Idris et al. (2018), AbuSiam (2015), and Abbadi et al. (2016), who conducted their studies in Jordan. They found a mean of ABSDAC of about 0.069.

Similarly, Rahman and Mohammed Ali (2006) found a mean of ABSDAC of 0.066, and evidence from Egypt may support the mean and the maximum value of DAC in the current study, Bassiouny (2016) documented that the mean and maximum value of DAC were 0.042 and 0.862, respectively. These findings document that data of DAC in Palestine were approximately like neighboring countries.

Table 5.1: Descriptive Statistics of the Dependent Variable - EM

N	Mean	Std. Deviation	Minimum	Maximum
232	0.0617	0.0734	0.0000	0.7639

EM for each of the firms of interest was recorded for the period interval of 8 years. The distribution of EM over the eight years (2011 - 2018) can be seen in Table 5.2. It can be observed that there was a higher, on average, EM in 2017 compared to the other years. However, most of the EM measurements seem close to the mean EM across the years according to the low standard deviations. There also seem to be outliers of EM present across the different years as the mean EM seems quite different from the maximum and minimum recorded in some cases (See Appendix 2).

Table 5.2: Descriptive statistics of EM from 2011 to 2018

Year	N	Mean	Std. Deviation	Minimum	Maximum
2011	29	0.0667	0.0544	0.0041	0.2663
2012	29	0.0609	0.0585	0.0026	0.2301
2013	29	0.0523	0.0449	0.0006	0.1901
2014	29	0.0448	0.0389	0.0042	0.1460
2015	29	0.0663	0.1008	0.0015	0.5326
2016	29	0.0534	0.0393	0.0012	0.1327
2017	29	0.0832	0.1376	0.0011	0.7639
2018	29	0.0657	0.0532	0.0000	0.2329
Total	232	0.0617	0.0734	0.0000	0.7639

Note: ANOVA performed resulted in an F-statistic of 0.74 and a P-value of 0.6399. This result leads to the conclusion that there is no difference in EM across the years. Hence, no need existed to use the year variable as a categorical variable in the analysis.

5.2.2 Descriptive Statistics of the Control Variables

Control variables were used to correct the bias estimation of the effects of the predictors. The exclusion of these variables could result in the effects of the predictors being over- or under-estimated. According to the data collected, there are three control variables whose distributions are summarized in Table 5.3. Each of the control variables has different measurement scales. The measurements of firm age seem distant from the mean firm age based on its high standard deviation compared to other control variables and their respective standard deviations.

Table 5.3: Descriptive Statistics of The Control Variables

Variables	N	Mean	Std. Deviation	Minimum	Maximum
FIRMAGE	232	24.05	15.384	2	73
CASHFLOW	232	0.0386	0.0892	-0.5306	0.3672
GROWTH	232	0.0326	0.1488	-0.5814	1.2468

Note: FIRMAGE = The number of years since the firm was established. CASHFLOW = The net cash flow from operating activities scaled by total assets. GROWTH = The Changing in total assets scaled by lagged total assets.

Concerning firm growth, the mean, maximum, and minimum values of firm growth were.0326; 1.2468; -0.5814, respectively. The result of firm growth was

consistent with the evidence from Indonesia that Harymawan and Nowland (2016) documented. Harymawan and Nowland (2016) documented mean, maximum, and minimum values of firm growth of 0.040; 1.225; -0.411, respectively. The data of this current study revealed that the mean of firm age was approximately 24 years. This finding is approximately similar to the study by Bassiouny (2016) in the Egyptian context that found the mean of firm age was 27 years. On the other hand, the mean of firm age was 34 years old in the 140 Greek firms listed (Koufopoulos & Gkliatis, 2018).

In terms of cash flow from operating activities, it is clear from the mean that there is a shortage of cash flow in the Palestinian non-financial firms listed. In comparison, Alsultan (2017) found a mean cash flow of 0.1067 in 85 Saudi non-financial listed companies, while the mean of cash in Palestine context was 0.0386. These results reflect that Saudi corporations are more effective in generating cash flow than the corporations in Palestine. Accordingly, the possible explanation of this deference in cash flow is the stable business environment in Saudi Arabia, while the opposite case exists in Palestine.

5.2.3 Descriptive Statistics of the BOD Characteristics Variables

The first set of variables to be incorporated in the regression model are the variables describing the BOD. There are six variables and their respective distributions summarized in Table 5.4. Most of these variables range between 0 and 1 except the size of the BODs, and their meetings.

Table 5.4: Descriptive Statistics of the BOD Characteristics Variables

Variables	N	Mean	Std. Deviation	Minimum	Maximum
Descriptive Statistics of Continuous Variables					
BODSIZE	232	8.79	2.222	5	15
BODMEET	232	5.92	1.49	2	12
BODINDEP	232	0.88	0.17	0	1
BODND	232	0.16	0.21	0	0.875
Descriptive Statistics of Dichotomous Variables					
BODRE_GC	232	0.33	0.472	0	1
CEO_DUAL	232	0.19	0.39	0	1

Notes: BODSIZ = Total number of directors on the board. BDMEET = Number of BOD meetings conducted annually. BODINDEP = The proportion of independent directors on the board to BOD size. BODND = The proportion of foreign directors on the board to BOD size. BODRE&GC = Dummy variable assigned "1" for a company with this committee, and "0" if otherwise. CEO_DUAL = Dummy variable assigned "1" if the CEO is also the chairman, and "0" if otherwise.

Regarding the descriptive results of BOD characteristics, Table 5.4 shows that the average BOD size (BODSIZE) of the study sample was 8.79 members, and the standard deviation was 2.222. This result aligns with the proposition of Lipton and Lorsch (1992), who documented that BOD should consist of eight members or nine members to be more effective in carrying out their duties. Indeed, the average of BOD size is consistent with the recommendation of PCCG (2009), which means that most Palestinian listed non-financial companies are relatively compliant with the recommendations of the PCCG (2009) that said that listed firms should appoint at least five members in the BOD, while the maximum size must be 11 members. This finding is analogous to Palestinian studies that have documented that the average of BOD size was eight to nine members approximately (e.g., Asmar et al., 2018; Yousef M. Hassan & Hijazi, 2015; Hassan & Hijazi, 2015; Hassan, 2016; Kutum, 2015; Dwekat, Mardawi, & Abdeljawad, 2018; Abdeljawad & Masri, 2020). Similarly, Makhlouf et al. (2018) and AbuSiam (2015) from Jordan and Rahman and Mohamed Ali (2006) from Malaysia found a mean BOD size of eight in the companies in their studies.

Concerning the number of BOD meetings (BODMEET), the descriptive finding revealed that non-financial companies held approximately six meetings on average each year. This implies that the Palestinian non-financial companies align with the recommendations of PCCG (2009) that at least six meetings should be held annually. The average number of BOD meetings in the current study align with prior studies conducted in Palestinian firms listed (Abdeljawad & Masri, 2020; Asmar et al., 2018; Kutum, 2015).

The mean frequency of BOD meetings in developed countries is relatively higher than the mean of Palestine as a developing country. For example, Xie et al. (2003) provided evidence from the United States, and Habbash et al. (2010) provided evidence from the United Kingdom that firms in these countries held approximately eight meetings annually. The higher frequencies of BOD meetings are considered a strong indicator of the effectiveness of BODs (Vafeas, 1999).

Table 5.4 shows that the average of BOD non-executive directors (BODINDEP) was 88%. This finding was quite good because it means that most BODs were independent. Some of the Palestinian non-financial listed firms did not comply with PCCG (2009) requirements. PCCG (2009) recommended that it was preferable for all directors in the BOD to be non-executive directors.

The average of BOD independence in this current research is relatively consistent with previous works conducted in the Palestinian context such as Zaid, Wang, and Abuhijleh (2019), Falah (2017), Kutum (2015), Dwekat et al. (2018), and Abdeljawad and Masri (2020). They found that the mean values of BOD non-executive directors were 89%, 71%, 90%, 91%, and 92%, respectively.

Concerning BOD nationality diversity (BODND), Table 5.4 shows that 84% of directors were Palestinians, while 16% were non-Palestinian or foreign directors. This

result is relatively consistent with Ibrahim and Hanefah (2016) and Makhlouf (2017), who have found that 11% and 10% of the directors in Jordanian companies listed are non-Jordanian, respectively.

Because no evidence from Palestine previously existed regarding nationality diversity, this current study is the first to address the presence of foreign directors in the BOD in Palestine. The proportion of foreign directors to BOD size is quite good for the PEX as a developing market and working under a situation of political unrest. Furthermore, the PCCG (2009) motivates BODs to appoint more diverse and expert directors to enhance the effectiveness of BOD in Palestine.

In terms of the committee of remunerations and governance (BODRE&GC), this study is the first one in Palestine to address this characteristic. Table 5.4 shows that one third (33%) of the non-financial listed companies in Palestine have a remuneration and governance committee. This result is below that of AbuSiam (2015), who found that 50% of Jordanian firms listed had a remunerations committee. The finding means that Palestinian firms still do not comply with the PCCG (2009), which recommended that listed firms have this committee to assist BODs in performing their responsibilities effectively to enhance the transparency and credibility of financial and administrative transactions.

Table 5.4 shows that the mean CEO-duality (CEO-DUAL) was 19%. That means 81% of the Palestinian listed firms separate the role of CEO and the role of chairman. Accordingly, these results reveal that 19% of the sampled companies in Palestine do not fully comply with the recommendations of PCCG (2009), which specified that the role of chairman and CEO must be separated.

The average of CEO-duality in this research is consistent with Zaid et al. (2019), who studied Palestinian non-financial firms listed from 2013 to 2016. They documented

that the average CEO duality was 19%, which is surprisingly like the finding of this current study. Furthermore, Dwekat et al. (2018), Abdelkarim and Zuriqi (2020), Abdeljawad and Masri (2020) determined that the average duality of CEO and chairman was 17.5%, 18% 19% in the Palestinian companies listed in PEX, respectively. Also, Hassan (2016) found that the average CEO non-duality was 87% in Palestinian shareholding companies. Thus, combining the role of chairman in sole position (CEO-DUAL) is not present in most Palestinian listed companies.

5.2.4 Descriptive Statistics of the AC Characteristics Variables

The second set of variables to be used in the panel regression models were variables describing the AC of each firm involved. The distributions of these variables are summarized in Table 5.5. These variables ranged between 0 and 1 except the size of the AC, which ranged between two and five members. The first division of Table 5.5 presents the descriptive statistics for the whole sample, which included the firm with and without ACs, while the second division illustrates the descriptive statistics of AC characteristics of the companies listed that already formed AC. Furthermore, this table elaborates that 47.5% of the companies listed have an AC, while others do not have this committee. This result is consistent with the study conducted in Palestine by Alia et al. (2020) that found 47% of the non-financial corporations listed on PEX formed AC according to the PCCG (2009) recommendations.

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Table 5.5: Descriptive Statistics of the AC Characteristics Variables

Variables	N	Mean	Std. Deviation	Minimum	Maximum
Descriptive Statistics of the AC Characteristics for the whole Sample					
ACSIZE	232	1.48	1.595	0	5
ACINDEP	232	0.34	0.476	0	1
ACFEXP	232	0.30	0.460	0	1
Descriptive Statistics of the AC Characteristics for the Firms with AC					
ACSIZE	111	3.17	.464	2	5
ACINDEP	111	0.875	0.224	0	1
ACFEXP	111	0.330	0.316	0	1

Note: **ACSIZE** = Total number the AC. **ACINDEP** = The proportion of non-executive directors to the total number to AC size. **ACFEXP** = Percentage of AC members who have financial expertise to total members of the committee

Table 5.5 shows that the mean of AC size (ACSIZE) for the whole sample was 1.48 members, while the maximum size was five members, and the minimum was 0 members. So, it can be noted from the mean value and the minimum value of AC size that some companies still do not have an AC because the formation of AC remains voluntary in Palestine. On the other hand, the mean value of the size of AC was 3.17 members in the companies that have AC. This result of the average of ACSIZE was consistent with past studies such as Asmar et al. (2018) and EL-Nabi (2016), who have provided evidence from Palestine, AbuSiam (2015) from Jordan, and Habbash (2010) from the United Kingdom. These studies reported that the mean of the AC size was approximately three members. This implies that the listed Palestinian companies that do not follow the recommendations of PCCG (2009) in the formation of the AC. Accordingly, 52.5% of the Palestinian non-financial listed firms have no ACs (Alia et al., 2020). As illustrated in Table 5.5, the average AC independence (ACINDEP) was about 34% for the whole sample, while the average in of this factor in the companies that have audit committees is about 87%. Also, the maximum percentage of ACINDEP was 100% members. On the other hand, the minimum percentage of ACINDEP was 0%

of members. As presented in Table 5.5, the non-financial companies in Palestine that have an AC might comply with the PCCG (2009) because of the mean of financial experts in AC was 30%, and 33% respectively.

Regarding the minimum value of existing financial experts on the AC, this study found that the minimum value was zero, which means some companies do not have ACs, and some ACs do not have financial experts. This is perhaps because the formation of an AC in listed non-financial firms remains optional in Palestine. The average of ACFEXP aligns with the study conducted in Palestine by Salem (2018), which found that the mean value of AC financial expertise in Palestine was approximately 30%. This finding was relatively below the average documented by AbuSiam (2015), which was that 41% of the AC members had financial expertise in Jordanian listed firms.

5.2.5 Descriptive Statistics of the Ownership Structure variables

Table 5.6: Descriptive Statistics of the Ownership Structure Variables

Variables	N	Mean	Std. Deviation	Minimum	Maximum
OWNERCONC	232	0.5718	0.2435	0.0000	0.9286
INSTIOWNER	232	0.5681	0.3037	0.0000	0.9588
FOREOWNER	232	0.2477	0.2798	0.0000	0.9241

Note: OWNERCONC = The percentage ownership of the stockholders who own more than 5% of the total shares, INSTIOWNER = The percentage of ordinary shares held by institutional investors to total equity, FOREOWNER = The percentage of ordinary shares held by foreign investors to total ordinary shares.

In addition to the already described variables, the last set of variables used in the regression analysis describes the ownership of the different firms. The distributions of the respective variables are summarized in Table 5.6. The ranges of the variables were between 0 and 1, and their respective deviations from the mean did not seem high.

Table 5.6 shows that the average ownership concentration (OWNCONC) was 57.18%, indicating highly concentrated ownership in Palestine. This means that a few

investors may control a listed company. Accordingly, Hassan (2016) documented that the average ownership concentration was 2.6 investors with a maximum of 7 investors and a minimum of 0 investors for Palestinian firms listed on the PEX. Furthermore, the maximum percentage was 100%, and the minimum percentage was 0, which block holders do not control means some listed firms. This result aligns with Abdelkarim and Zuriqi (2020). They documented that the average ownership concentration was 57% in the non-financial companies listed in PEX with 0% as a minimum value, which meant that the ownership of some companies was dispersed among stockholders. Additionally, Dwekat et al. (2018) that an average ownership concentration of 65%, which was relatively like the average in the current research. Furthermore, Hassan et al. (2017), who conducted their research in the United Arab Emirates and Jordan as emerging economies, found that the average of ownership concertation was 51% approximately. These findings confirm that concentrated ownership characterizes emerging economies in general and the Middle Eastern countries.

Table 5.6 shows that 56% of the overall investors were institutional. On the other hand, the average percentage of shares owned by foreign investors (FOREOWNER) was about 25% of the total outstanding shares. The averages of institutional and foreign ownership are consistent with Hassan et al. (2016) and Zaid et al. (2020), who conducted their research in Palestine. They found an average of INSTIOWNER (FOREOWNER) of 52% (25%) and 48% (27%), respectively. Other evidence from Palestine revealed that the average of institutional ownership was about 43%, which is relatively near to the mean of institutional ownership in this current study Ijbara & Khoury (2009). Regarding foreign ownership in Palestine, Saleh, Abdul, and AbuBakar (2018) concluded that the average of foreign investors was still low, and their role was

weak. This might be attributed to the unstable environment in Palestine, which makes an unattractive environment in which to make their investments.

5.2.6 Descriptive Statistics of the Moderation Model's Variables

Besides the set of control variables, the moderation model included BOD Quality, AC quality variable, and political instability variable to investigate its effect on the relationship between the EM and each of BOD Quality and AC Quality, through including the interaction terms between the political instability and each of BOD Quality and AC Quality. Table 5.7 shows the descriptive statistics for political instability, BOD Quality, and AC Quality.

Table 5.7: Descriptive Statistics of the Moderation Model's Variables

Variables	N	Mean	Std. Deviation	Minimum	Maximum
POLINS	232	0.500	0.500	0.000	1
BODQALI	232	0.460	0.199	0.000	0.833
ACQUALI	232	0.416	0.450	0.000	1

Note: POLINS = Equals one (1) for the years 2011 to 2014, representing severe political instability and zero (o) if otherwise. BODQALI = It is restricted by "0-1" with a higher score indicating higher effectiveness or quality of the BODs. ACQUALI = It is restricted by "0-1" with a higher score indicating higher effectiveness or quality of the ACs.

Table 5.7 shows the average of the quality or effectiveness of BOD (BODQUALI) from 2011 to 2018 was 0.460, and the minimum and the maximum scores were 0.833 and 0.000, respectively. Additionally, Table 5.7 shows that the mean value of the effectiveness of the quality of AC (ACQUALI) was 0.416, and the minimum and maximum scores were 0 and 1, respectively. These results were quite low, which shows relative weakness in the effectiveness of the AC and BOD in the listed Palestinian non-financial companies, while the AC might relatively have a better score of the maximum value in comparison with the maximum value of BOD. These results will be explained

in the regression results sections. Regarding to the moderator, the dummy variable is utilized to measure it, and the period of the study divided into two periods. So, codded "1" for the period from 2011 to 2014 and "0" otherwise. So, the mean on POLIN appear to be 50%.

5.3 Correlation Analysis

Table 5.8 shows the findings of the Pearson correlation tests of the predictors, control variables, and EM (ABSDAC). This Pearson correlation test evaluates the null hypothesis that no linear association exists between the variables involved. The significance of the test is indicated by a 0.01 significance level or a 0.05 significance level, and the values recorded are the Pearson correlation coefficients. Among all the control variables significantly linearly related to the EM, only firm growth (AGROWTH) was strongly related, while the others were moderately related to the EM. Overall, the correlation matrix shows that the relationships amongst the variable vary from weak to moderate and strong. These linear relationships, which seem to be evident among some of the variables, call for concern that multicollinearity might exist in a linear model including all these variables. However, the correlations through independent variables are not high, except for the correlation between institutional ownership and ownership concentration about (80%) and the correlation between AC size and AC independence about (90%). Even so, Asteriou and Hall (2007) and Alia et al. (2020) have confirmed that the correlation between two independent variables of about less than 0.9 does not raise a critical multicollinearity problem. However, a variance inflation factor (VIF) was tested before running the model statistically in the software to confirm that the relations between independent variables are free of multicollinearity problems.

Table 5.8: Correlation Coefficients between Variables of the Study

#	VARLIST	1	2	3	4	5	6	7	8	9	10	11	12
1	absdacc	1											
2	bodsize	-0.1295	1										
3	bodmeet	-0.0791	-0.0781	1									
4	bodindep	-0.0124	0.0466	-0.1007	1								
5	bodnd	-0.1002	-0.0459	-0.1407	0.1198	1							
6	bodre_govc	-0.089	0.041	0.2585	0.0636	0.0486	1						
7	ceodual	-0.0149	-0.0137	-0.1298	-0.4265	-0.2893	-0.0745	1					
8	acsize	-0.0838	0.1355	0.2543	0.1783	0.2358	0.5414	-0.1139	1				
9	acindep	-0.0823	0.0864	0.1278	0.1377	0.2396	0.5114	-0.0533	0.9132	1			
10	acfexp	0.0523	-0.0463	0.0203	0.2174	0.0649	0.3233	-0.1969	0.6026	0.6354	1		
11	ownerconc	0.0039	-0.0394	-0.3336	0.0889	0.2375	-0.1183	-0.3506	-0.0925	-0.026	0.1875	1	
12	instiowner	-0.1507	0.1813	-0.2794	0.1344	0.2952	-0.031	-0.2802	0.0302	0.101	0.1852	0.828	1
13	foreowner	0.0763	0.0623	-0.1303	0.1346	0.3947	0.246	-0.1067	0.326	0.3991	0.4262	0.2132	0.2041
14	acquali	-0.059	0.1298	0.2012	0.1904	0.2425	0.5213	-0.1413	0.9487	0.9398	0.7426	-0.0315	0.0987
15	bodquali	-0.0099	-0.3696	0.1884	0.4709	0.3515	0.331	-0.6515	0.3335	0.2888	0.39	0.318	0.2734
16	polins	-0.0748	0.0817	-0.0058	0.0468	-0.0151	-0.119	0.0476	-0.1164	-0.0882	-0.0707	-0.0932	-0.0555
17	cashflow	-0.3827	0.022	-0.0728	-0.2012	0.0196	-0.0842	0.0347	-0.0531	-0.0205	-0.1157	-0.0398	-0.0066
18	agrowth	0.5273	-0.0344	0.0547	-0.0351	-0.148	0.0156	0.008	0.0699	0.0677	0.1162	-0.03	-0.1595
19	firmage	-0.0172	0.0234	0.0843	-0.1243	-0.3617	-0.1147	0.3107	-0.1001	-0.0843	0.0449	-0.2981	-0.4587

#	VARLIST	13	14	15	16	17	18	19
13	foreowner	1						
14	acquali	0.4455	1					
15	bodquali	0.1518	0.3415	1				
16	polins	0.0171	-0.096	-0.1117	1			
17	cashflow	0.023	-0.0608	-0.2033	0.0807	1		
18	agrowth	0.0138	0.0661	-0.0506	-0.12	-0.2213	1	
19	firmage	-0.0655	-0.1076	-0.2473	-0.1982	-0.0208	0.1885	1

Note: Correlation is significant at the 0.05 level (2-tailed). Correlation is significant at the 0.01 level (2-tailed).

5.4 Regression Analysis

5.4.1 Choosing Suitable Panel Regression for the Study's Models.

The association between EM and CG is captured using three panel regression models, i.e., the pooled OLS regression, fixed effects, and random effects were estimated. Moreover, the same models were applied to study the influence of moderation effects on the relation between CG and EM. Furthermore, the study was concluded with the most appropriate full model using statistical tests, as shown in Table 5.9.

The Hausman test was implemented to compare the fixed effects model from one side and the random effect model from the other side. The test found that the random effects model was more suitable for capturing the relationship under study. Hence, the random effect model was utilized to estimate both the direct and moderation models. This test evaluates the null hypothesis that the random effect model is better. Accordingly, the main factor distinguishing the fixed effects regression model from the random effect's regression model is whether the term error is related to the explanatory variables included. Moreover, for the sake of determining the existence of the correlation, the Hausman specification test (1978) was used to choose which model is more appropriate for the data analysis (Hausman, 1978; McKnight & Weir, 2009).

Indeed, the random effects model proposes that no correlation exists between explanatory variables and the error term. On the other hand, the fixed effects model proposes that explanatory variables are associated with the term error. Therefore, this study tested the following two hypotheses:

H0: Unobserved effect is uncorrelated with the explanatory variables.

H1: Unobserved effect is correlated with the explanatory variables.

The null hypothesis (H0) refers to the random effects, while the alternative hypothesis (H1) is an indicator of the fixed effects. The Hausman was utilized to differentiate between the H0 and H1. Baltagi (2008) said that if a significant p-value <0.05 was generated, then the null hypothesis was rejected, and the fixed effects model is efficient and should be used, and vice versa. Table 5.9 revealed that the null hypothesis was accepted according to the Hausman test results. Accordingly, the random effects model is appropriate for both the main and moderating models in this study.

Also, to compare the chosen random effects model and the pooled OLS regression model, the Breusch and Pagan Lagrangian multiplier test was utilized. This statistical test concluded that the pooled model was a better model to estimate the main model, while a random effect was a more appropriate model to estimate the moderation model. This test evaluates the null hypothesis that the variances across the firms are equal to zero, implying that the pooled model is more appropriate.

This study used the Breusch-Pagan Lagrange Multiplier test to compare the model of Pooled OLS and the random effects model to test the reality of random effects (Breusch & Pagan, 1980). The null hypothesis in this test is considered as the variance across units > 5% for the main model. Hence, the Pooled OLS regression model is more appropriate than the random effects model. Concerning the moderating model, the random effects are the proper model according to Breusch and Pagan LM test, which is elaborated in Table 5.9.

Table 5.9: Hausman Test and Breusch and Pagan LM test

Tests	Main Model		Moderation Model	
	Statistic	**P-value**	**Statistic**	**P-value**
Hausman Test	22.25	.1015	11.15	0.1769
Breusch and Pagan LM Test	0.02	0.4433	24.75	<0.001

5.4.2 Diagnosis Analysis

5.4.2.1 Normality Analysis

The White test was used to investigate the panel data non-normality problem (Greene, 2007). The test was used to test the null hypothesis (Ho: Panel Normality) versus the alternative hypothesis (Ha: Panel Non-Normality). Table 5.10 shows the results of the test for each model, which do not support the null hypothesis because the P-values are less than 0.05, which means that the study's models did not meet the normality assumption.

Table 5.10: Normality Tests Results for The Panel Regression Models

Models	Chi2	P-value
Model1	669.63	<0.001
Model2	372.95	<0.001
Model3	480.08	<0.001
Model4	483.22	<0.001
Main Model	324.37	<0.001
Moderation Model	578.34	<0.001

Note: Model 1: Includes the control variables (AGROWTH, CASHFLOW, FIRMAGE)). Model2: Includes the control variables in model1 in addition to BOD variables (BODSIZE, BODMEET, BODINDEP, BODND, BODREG&GC, CEODUAL). Model3: Includes the control variables in model1 in addition to AC variables (ACSIZE, ACINDEP, ACFEXP). Model4: includes the control variables in model1 in addition to OWNERSHIP variables (OWNERCONC, INSTIOWNER, FOREOWNER). Main Model includes all variables. Moderation Model is the moderation model that includes control variables in addition to (POLINS, BODQUALI, ACQUALI, BODQUALI*POLINS, ACQUALI*POLINS).

Despite the importance of testing the assumption of the normality of the distribution of the data under estimation, Gujarati (2009) and Gujarati and Porter (2009) argued that in using the t-test and F-test, which depend on the normal distribution of the error term, the assumption of normality might not be extremely important in samples greater than 25 companies. Since the sample size of this study is relatively enough (n=232), the normality assumption becomes less important and can be dismissed based on the central limit theorem (Elhelou, 2019). Furthermore, if this assumption is not met

in panel data, then this will not cause a problem, and parametric can still be applied correctly. However, Gujarati and Porter (2009) argued that the assumption of normality is a critical issue and should be met if the data less than 100 observations but can be relaxed if the data is larger than 100 observations. As a result, the sample size of this study is over than 25 companies with more than 100 firm-year observations, and panel data is utilized. Thus, the parametric model can be tested regardless of whether the data met the assumption of a normal distribution or not. Moreover, the terms of errors of the models used in this study is normally distributed.

5.4.2.2 Multicollinearity Analysis

Multicollinearity issues in the study's models were investigated by calculating the variance inflation factor-VIF for each variable in each model. According to Gujarati (2009), a VIF higher than 10 indicates a serious multicollinearity problem. In this study, all VIFs were less than 10, which indicates that there is no multicollinearity. Table 5.11 shows the VIF values for each variable in each model.

Table 5.11: Multicollinearity Investigation Results based on VIF Values

Variables	Main Models					Moderation Model	
	Model1	Model2	Model3	Model4	Main model	Variables	VIF
GROWTHA	1.09	1.12	1.10	1.13	1.17	**GROWTH**	1.12
CASHFLOW	1.05	1.12	1.10	1.06	1.15	**CFOAR**	1.11
FIRMAGE	1.04	1.17	1.15	1.32	1.62	**FIRMAGE**	1.17
BODSIZE		1.18			1.40	**POLINS**	6.62
BODMEET		1.13			1.41	**ACQUALI**	2.15
BODINDEP		1.79			1.39	**ACQUALI*POLINS**	3.13
BODND		1.36			1.71	**BODQUALI*POLINS**	7.82
BODRE&GC		1.19			1.56	**BODQUALI**	2.27
CEODUAL		1.67			1.87		
ACSIZE			2.36		8.37		
ACINDEP			2.47		7.65		
ACFEXP			1.86		2.44		
OWNERCONC				3.38	4.96		
INSTIOWNRER				3.91	5.27		
FOREOWNRER				1.05	1.64		
Mean	**1.06**	**1.28**	**1.63**	**1.97**	**2.91**	**Mean**	**3.18**

5.4.2.3 Heteroskedasticity Analysis

The Engle (ARCH) test was used to test panel data heteroscedasticity (Greene, 2007). The test was used to examine the null hypothesis (Ho: Panel homoscedasticity) versus the alternative hypothesis (Ha: Panel heteroscedasticity). This test was performed on the estimated direct model. Table 5.12 shows the results of the test for each model, which do not support the null hypothesis at a significance level of 0.05. Hence, the models have a heteroscedasticity problem.

Concerning the moderation model, Heteroscedasticity was tested using panel groupwise heteroscedasticity tests, which include the Lagrange Multiplier LM Test, Likelihood Ratio LR Test and Wald Test. These tests indicated that the model has a heteroscedasticity problem. In summary, this study used cluster-robust standard errors reliable strategy to remedy, tickle, and fix the heteroscedasticity as consistent with the suggestions of Wooldridge (2012), Hoechle (2007), and Makhlouf (2017). The Code of cluster (id) or robust is used after the regression equation in Stata to correct the problems of heteroscedasticity problems in the data set.

Table 5.12: Heteroscedasticity Tests Results for the Panel Regression Models

Models	Chi2	P-value
Model1	14.02	0.0002
Model2	16.22	0.0001
Model3	14.41	0.0001
Model4	10.94	0.0009
Main Model	13.40	0.0003
Moderation Model	LR = 123.69	<0.001
	LM = 4.50e+04	<0.001
	Wald = 7.82e+05	<0.001

Note: Model 1: Includes the control variables (AGROWTH, CASHFLOW, FIRMAGE). Model2: Includes the control variables in model 1 in addition to BOD variables (BODSIZE, BODMEET, BODINDEP, BODND, BODREG&GC, CEO_DUAL). Model 3: Includes the control variables in model1 in addition to AC variables (ACSIZE, ACINDEP, ACFEXP). Model 4: includes the control variables in model1 in addition to OWNERSHIP variables (OWNERCONC, INSTIOWNER, FOREOWNER). Main Model includes all variables. Moderation Model is the moderation model that includes control variables in addition to (POLINS, BODQUALI, ACQUALI, BODQUALI*POLINS, ACQUALI*POLINS).

5.4.2.4 Serial Correlation Analysis

Drukker (2003) provides simulation-based evidence that demonstrates that this test has good properties of power when implemented on reasonable sample sizes. Wooldridge (2002) discussed the test for serial correlation withing the idiosyncratic errors of a linear panel-data model. Therefore, the Wooldridge test was used to check whether the study's model suffered from an autocorrelation. The test aims at testing the null hypothesis, which states that there is no serial correlation. The results in Table 5.13 shows that all P-values are more than 0.05. Hence, the conclusion can be made that no serial correlation is present in the study's models. In summary, the data of this study is free of serial correlation problems, but to fix any serial correlation problems, the cluster-robust standard errors technique was used, as Wooldridge (2012) recommended.

Table 5.13: Serial Correlation Tests Results for The Panel Regression Models

Models	F	P-value
Model1	2.39	0.1337
Model2	1.81	0.1892
Model3	2.15	0.1536
Model4	3.86	0.0593
Main Model	3.17	0.0766
Moderation Model	2.06	0.1626

Note: Model 1: Includes the control variables (GROWTH, CASHFLOW, FIRMAGE)). Model2: Includes the control variables in model 1 in addition to BOD variables (BODSIZE, BODMEET, BODINDEP, BODND, BODREG&GC, CEO_DUAL). Model 3: Includes the control variables in model1 in addition to AC variables (ACSIZE, ACINDEP, ACFEXP). Model 4: includes the control variables in model1 in addition to OWNERSHIP variables (OWNERCONC, INSTIOWNER, FOREOWNER). Main Model includes all variables. Moderation Model is the moderation model that includes control variables in addition to (POLINS, BODQUALI, ACQUALI, BODQUALI*POLINS, ACQUALI*POLINS).

5.5 Estimation Results

Hence, because of the normality, heteroscedasticity, and outlier problems, robust techniques were used to estimate the direct and moderation problems. With the help of

robust techniques, these problems will not be a danger to the models' validity. The model estimates can be seen in Table 5.14.

5.5.1 The Regression Results of the Main Model

The direct model was estimated fully as the main and partially using models 1-4. The global F-test for each model concludes that at least one significant relationship exists in EM and CG. Also, the full model explains 48% (R2) of the data. However, BOD, AC, and ownership structure variables independently explain differently. Regarding the estimates of the main model effects, among the CG variables, BODMEET, BODINDEP, BODND BODRE&GC, INTSTIOWNER, FOREOWNER were significantly related to EM. The control variables were all significantly related to the EM as expected. Also, only AGROWTH, ACFEXP, and FOREOWNER had a positive relationship with EM, while the rest had a negative relationship. The models are used in the Pooled OLS Regression below. Model1, model2, model3, model4, and main model are respectively expressed as follows:

$$ABSDACit = a0 + \beta 1\ AGROWTH\ it + \beta 2\ CASHFLOW\ it + \beta 3\ FIRMAGE\ it + \mathcal{E}_{it} \quad (5.1)$$

$$ABSDACit = a0 + \beta 1\ AGROWTH\ it + \beta 2\ CASHFLOW\ it + \beta 3\ FIRMAGE\ it + \beta 4\ BODSIZE\ it + \beta 5\ BODMEET\ it + \beta 6\ BODINDEP\ it + \beta 7\ BODND\ it + \beta 8\ BODRE\&GC\ it + \beta 9\ CEO\_DUAL\ it + \mathcal{E}_{it} \quad (5.2)$$

$$ABSDACit = a0 + \beta 1\ AGROWTH\ it + \beta 2\ CASHFLOW\ it + \beta 3\ FIRMAGE\ it + \beta 4\ ACSIZE\ it + \beta 5\ ACINDEP\ it + \beta 6\ ACFEXP\ it + \mathcal{E}_{it} \quad (5.3)$$

$$ABSDACit = a0 + \beta 1\ AGROWTH\ it + \beta 2\ CASHFLOW\ it + \beta 3\ FIRMAGE\ it + \beta 4\ OWNERCONC\ it + \beta 5\ INSTIOWNER\ it + \beta 6\ FOREOWNER\ it + + \mathcal{E}_{it} \quad (5.4)$$

$$ABSDAC_{it} = a0 + \beta 1\ AGROWTH_{it} + \beta 2\ CASHFLOW_{it} + \beta 3\ FIRMAGE_{it} + \beta 4\ BODSIZE_{it} + \beta 5\ BODMEET_{it} + \beta 6\ BODINDEP_{it} + \beta 7\ BODND_{it} + \beta 8\ BODRE\&GC_{it} + \beta 9\ CEO\_DUAL_{it} + \beta 10\ ACSIZE_{it} + \beta 11\ ACINDEP_{it} + \beta 12\ ACFEXP_{it} + \beta 13\ OWNERCONC_{it} + \beta 14\ INSTIOWNER_{it} + \beta 15\ FOREOWNER_{it} + \varepsilon_{it} \quad (5.5)$$

Table 5.14: Pooled OLS Regression Results of the Main Model

Variables	Main Model									
	Model1		Model2		Model3		Model4		(Main model)	
	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value
AGROWTH	0.240	0.004***	0.242	0.002***	0.245	0.003***	0.219	0.005***	.218	0.005***
CASHFLOW	-0.227	0.033***	-0.259	0.013**	-0.225	0.034***	-0.232	0.019**	-0.265	0.007***
FIRMAGE	-0.015	0.029***	-0.019	0.007***	-0.017	0.007***	-0.027	0.002***	-0.034	0.000***
BODSIZE			-0.003	0.049**					-0.002	0.421
BODMEET			-0.005	0.018**					-0.005	0.027**
BODINDEP			-0.035	0.058**					-0.042	0.033**
BODND			-0.032	0.150					-0.044	0.091*
BODRE&GC			-0.014	0.046**					-0.018	0.014**
CEO_DUAL			-0.007	.354					-0.013	0.427
ACSIZE					-0.007	0.101			-0.008	0.866
ACINDEP					0.006	0.645			-0.012	0.427
ACFEXP					0.026	0.106			0.013	0.475
OWNERCON							0.084	0.038**	0.028	0.478
INSTIOWNRER							-0.104	0.007***	-0.079	0.032**
FOREOWNRER							0.024	0.144	0.050	0.013**
_cons	0.106	<0.001	0.27	<0.001	0.126	0.000	0.150	<0.001	0.285	<0.001
R-square	0.367		0.414		0.392		0.418		0.478	
R-square change			0.047		0.025		0.051		0.120	
F-stat	3.48		3.34		4.11		3.35		3.47	
Prob > F	0.0167		<0.001		<0.001		0.003		<0.001	

Notes: ABSDAC = The absolute value of DAC calculated by the model of Kothari et al. (2005). GROWTH = The change in total assets scaled by lagged total assets. CASHFLOW = The net cash flow from operating activities scaled by total assets. FIRMAGE = The number of years since the firm is established. BODSIZ = Total number of directors on the board. BDMEET = Number of BOD meetings conducted annually. BODINDEP = The proportion of independent directors on the board to BOD size. BODND = The proportion of foreign directors on the board to BOD size. CEO_DUAL = Dummy variable with "1" if the CEO is the chairman, and "0" otherwise. BODRE&GC = Dummy variable coding "1" for a company with this committee, and "0" otherwise. ACSIZE = Total number the AC. ACINDEP = The proportion of non-executive directors to the total number to AC size. ACFEXP = Percentage of AC members who are financially expertise to total members of the committee. OWNERCONC = The percentage ownership of the stockholders who own more than 5% of the total shares, INSTIOWNER = The percentage of ordinary shares held by institutional investors to total equity, FOREOWNER = The percentage of ordinary shares held by foreign investors to total ordinary shares.

The results of the main model in Table 5.14 show that BOD number of Meetings (BODMEET), BOD independence (BODINDEP), BOD national diversity (BODND), the presence of remuneration and governance committee (BODRE&GC), institutional

ownership (INSTIOWNER), and foreign ownership (FOREOWNER) were significantly related to EM practice in Palestine at the 1%, 5%, and 10% significance levels. The coefficient signs of these variables are consistent with the study's expectations. Thus, hypotheses H2, H3, H4, H5, H14, and H15 are supported based on the EM practice.

Nevertheless, the results reveal an insignificant relationship between BOD size (BODSIZE), AC Size (ACSIZE), AC Independence (ACINDEP), and Ownership concentration (OWNERCONC) and EM. That is to say, the coefficient signs of these variables are consistent with study expectations. Otherwise, the results reveal an insignificant relation between CEO Duality (CEO_DUAL) and AC Financial Expertise and EM. As a result, the coefficient signs of these variables are inconsistent with study expectations. The findings indicate that growth (AGROWTH) was positively associated with EM at the 1% level of significance, while firm age (FIRMAGE) and cash flow to total assets (CASHFLOW) had a negative effect at the 1%. The results of the main model will be elaborated in the next sections.

5.5.1.1 BOD Size

In accordance with the main model, the finding of hypothesis H01 revealed that there is an insignificant negative relationship between BOD size and EM practices in Palestine. Table 5.14. shows that the p-value was greater than 10%, which indicates that the BOD size had an insignificant relationship with EM practices. On the other hand, the results of the second model revealed that there is a strong and negative relationship between the board size and the magnitude of earnings management at P-value less than 5%. Hence, there is no evidence to reject the hypothesis number one and, thereby, this hypothesis has been accepted. This result does align with preceding studies, indicating

a significant relationship between the size of the BOD and EM activities (Bala, 2015; Peasnell et al., 2005).

On the other hand, the observation of the second model is inconsistent with the study, which was most recently conducted in Palestine by Alia et al. (2020). They observed a negative association between BOD size and DAC in the non-financial corporation listed on PEX but in significant (Alia et al., 2020). The observation of the second model of this research contrasts with Rahman and Mohamed Ali (2006) reported results, which showed a positive relation between BOD size and EM practices in the Malaysian context. The reason behind the variations in the results of previous studies might be attributed to the variations in the attributes of firms listed and national, economical, and political characteristics.

Nonetheless, the observation of the main model of this research does align with the finding that Bradbury, Mak, and Tan (2013) documented, who found that BOD size had an insignificant relation with EM practices. Furthermore, Idris (2012) has found an insignificant relation between BODSIZE and EM in the industrial firms in the Hashemite Kingdom of Jordan.

Abdou, Ellelly, Elamer, Hussainey, & Yazdifar (2020) examined the association between CG and EM. for a sample of British and Egyptian firms. Their findings showed that UK companies are likely to have lower levels of EM if they: have smaller BODs, while Egyptian companies are likely to have lower levels of EM if they have larger BODs. Their findings can contribute to an increase in the credibility of financial statements for investors in both the UK and Egypt, as they provide empirical evidence that the BOD plays a critical role in mitigating EM. So, Smaller BOD size likely to be more effective in reducing EM in Palestine according to the regression results of this current study. Hence, the policy makers in Palestine should focus on the BOD sizes in

Palestine to be stronger in mitigating EM and increasing the faithfully of financial reports to construct a deep confidence in PEX to attract more prospective investors.

Theoretically, the results of board size in this research aligns with the perspectives of agency theory. Lipton and Lorsch (1992) and Jensen (1993) argued that firms should not appoint too many members to the BOD and proposed that the ideal number should BOD should be from 7 to 8 directors. Lipton and Lorsch (1992) argued that a too large BOD was less effective in criticizing the policies of top management and less effective in controlling CEO.

According to the argument above, the board size in Palestine is very important element in tickling the behaviour of the exertive management and restrict them in engaging in practicing critical levels of EM. One possible explanation of the relationship between boards' size and EM might because of the appropriate BOD size in Palestinian companies, which was elaborated in the descriptive analysis, as shown in Table 5.4. The descriptive analyses illustrated that the minimum BOD size was 5 directors, and the maximum was 15, with an average of 8.8 directors. The average of BOD size in Palestine is consistent with the advocates of agency theory.

5.5.1.2 BOD Meetings

The results of hypothesis H02 shows that EM practices will decrease as the frequency of BOD meetings increase. Hence, this result aligns with agency theory perspectives. This study found a statistically significant and negative relationship between the number of annual BOD meetings and EM. The p-value < 0.05 produced substantial evidence to accept hypothesis H02.

This finding aligns with some previous studies that have found a negative and significant association between EM and BOD meetings (Alghamdi, 2012; Bala, 2015;

Chatterjee & Rakshit, 2020; Sarkar et al., 2008; Xie et al., 2003). These studies also found a negative and significant relationship between the number of BOD meetings and EM practices.

This finding of this current study contrasts with a few studies that have examined the association between BOD meetings and EM. For example, Abbadi & Al-zyoud (2012), Habbash (2013), and Ngamchom (2015) all found no association between EM and the frequency of BOD meetings.

The result aligns with hypothesis H02 that posited a negative association between BOD meetings and EM. Accordingly, non-financial listed companies in Palestine seem to have adopted the PCCG (2009) regarding the frequency of BOD meetings, which has stated that the number of meetings should be six annual meetings.

5.5.1.3 BOD Independence

Table 5.14 shows that the percentage of non-executive directors in the BOD (BODINDEP) had a significant and negative relationship with EM practices at a p-value < 1%. This inverse association indicates that EM practices will decrease as the presence of non-executive directors in the BOD increases. Hence, H03 was supported. This result is consistent with the tenets of agency theory. The agency theory argues that the presence of more independent directors on the BOD might enhance the effectiveness of the BOD in deterring managers form engaging in EM. An effective BOD plays a vital role in reducing agency problems and conflicts between the BOD and executive managers (Fama & Jensen, 1983; Pfeffer & Salancik, 2003)

Furthermore, this result aligns the findings of many previous empirical studies that determined that the existence of independent members led to enhancing the monitoring role of the BOD of directors. These include Chatterjee and Rakshit (2020),

Diri et al. (2020), Mangena et al. (2012), Türegün (2018), Klein (2002), Xie et al. (2003), Peasnell et al. (2005), Davidson, Goodwin-Stewart, and Kent, (2005), Benkel et al. (2006), Hutchinson et al. (2008), Jaggi et al. (2009), Dimitropoulos and Asteriou (2010), Alves (2011) Alghamdi (2012), Habbash (2013) and Uwuigbe et al. (2014), among others. These studies found a significant and relationship between BOD independence and EM.

Accordingly, independent directors are an excellent mechanism to monitor management, and the level of EM in the Palestinian non-financial firms listed on PEX is reduced when there are more independent directors. Thus, the number of independent members on BOD seems a strong indicator to current investors to be more confident about the information released about the financial reports.

5.5.1.4 BOD Nationality Diversity

Table 5.14 shows that the proportion of BOD nationality diversity (BODND) had a significant and negative association with EM practices, as the coefficient sign of this relationship was negative at p-value < 0.10. This finding indicates that EM practices might decrease as the number of foreign directors on the BOD increases. Hence, hypothesis H04 is supported.

From the agency theory perspective, a more diversified BOD leads to greater improvement in management monitoring functions because BOD diversification leads to more BOD independence, which reduces agency costs (Carter et al., 2007). Therefore, a greater diversity of directors serving on the BOD means that the BOD can do more monitoring and more evaluating of management actions and behaviors, which, in turn, leads to an increased quality of financial reports.

This finding is also consistent with Upper Echelon Theory argues that the existence of foreign directors on the BOD brings a variety of experiences and diverse knowledge to the company and new ideas about how to deal with multinational problems if they arise and helps firms to deal with foreign problems (Pfeffer & Salancik, 2003). In a similar line, Resource Dependence Theory posits that foreign directors provide additional value to the board through having different skill sets and experiences (Makhlouf et al., 2017).

Furthermore, this result aligns some prior studies that have been conducted in different countries around the world. For example, Hashim, Ahmed, and Huey (2019) investigated the association between BOD nationality and the quality of earnings reported in the companies listed in the Main Market of the Bursa Malaysia. They found that nationality diversity had a significant impact on the reported earning quality. Du, Jian, and Lai (2017) used a sample of Chinese firms to investigate the monitoring role of foreign directors in EM. Their study found that EM was significantly and negatively related to the ratio of foreign directors on corporate boards. Additionally, Ibrahim and Hanefah (2016) explored the influence of BOD national diversity on the level of corporate social responsibility (CSR) disclosures. They found a significant and positive relationship between the level of CSR disclosure and BOD national diversity in Jordanian listed companies.

5.5.1.5 The Existence of the Remunerations and Governance Committee

Table 5.14 indicates that the presence of a remuneration and governance committee (BODRE&GC) had a significant and negative relationship with EM practices at a p-value < 10%. The finding of this study generated strong evidence aligning with agency theory, which has suggested that the existence of a remuneration

and governance committee can restrict managers in practising EM. Thus, hypothesis H05 is accepted. In the context of other research, the current study produced a unique result in its examination of the association between the presence of remuneration and governance committees and the level of EM practices. This unique finding indicates that the association between EM and the committee of remuneration and governance was significant and negative.

The result somewhat aligns with Habbas (2011), Habbash (2010), and AbuSiam, (2015). They found a negative, although insignificant, association between the remuneration and governance committee and the level of EM. However, this result was inconsistent with the results of prior research like that of Alghamdi, 2012 in Saudi Arabia, which showed that a remuneration committee was ineffective in reducing the level of EM.

The remuneration and governance committee was inserted as an essential component of the governance that recent CG regulations in Palestine required. The findings of the current study seem to indicate that the implementation of this requirement has produced the desired results. To sum up, it sounds that the companies which formed the remuneration and governance committee seeks to implement the CG best practice to mitigate the agency problems to boost the quality of financial reports.

to sum up and Based on the results of both the second and the main model, the existence of remuneration and governance committee is effective in reducing EM. I already corrected that in the discussion. The measurement of this variable is given “1” if the company formed this committee and “0” otherwise. 33% of companies listed formed remuneration and governance committee. Indeed, the attributes of this committee have not been disclosed in the financial reports. So, dummy variable is used to measure only the existence of this committee. There are few studies dealt with the

existence remuneration and governance committee. Unlike the study of Abusiam (2015) which has been conducted his study in Jordan, this study found significant and negative relationship association between REM&G committee and EM.

5.5.1.6 CEO Duality

Hypothesis (H06) posited a negative relationship between CEO-Duality and the level of EM practices. As elaborated in the regression presented in Table 5.14, the result of this common factor shows a negative and insignificant relation between CEO duality and EM (at p-value > 0.10). The direction of the hypothesis H06 was contradicted with the predicted sign, which was positive, so hypothesis H6 was rejected. This observation does not align with several previous studies. For instance, Agrawal and Chadha (2005) indicated that duality reduces the effectiveness of the BOD in its monitoring functions. Moreover, the result of the current study is inconsistent with Klein (2002), Gulzar and Wang (2011), and Uwuigbe et al. (2014). These studies indicated that a positive association existed between CEO duality and the level of EM.

Conversely, the observation of the current study aligns with Alrayes (2019) that conducted his study in Palestine by addressing the service and industrial companies listed in the PEX. He found a negative relationship between CEO duality and EM, which means if CEO duality exists, then the EM level would be minimal. The result is also consistent with Alia et al. (2020) that addressing the association between CG and EM in the Palestinian context, and the study of Chatterjee and Rakshit (2020), which was conducted in India. Both studies found a significant and negative relationship between CEO duality and EM. One possible explanation may be that companies appoint an appropriate person to serve as both chairperson and the CEO (AbuSiam, 2015). It should be noted that the duality between the position of CEO and chairman exists more in less

developed states, which weakens the accountability of the chairman (Alia et al., 2020). the observation of CEO duality in this study is in line with the stewardship theory that the unity between the occupation of CEO and chairman provides better control over the firm (Donaldson & Davis, 1991). Similarly, Abdou et al. (2020) have showed that CEO duality in British and Egyptian firms is more likely to mitigate EM practices. Furthermore, advocates of the Stewardship Theory contend that the duality will improve a company's performance because management compensation is usually linked to a company's performance, which leads a CEO to be concerned and motivated to improve a firm's performance (Rechner & Dalton, 1991).

On the other hand, this finding does not align with agency theory, which proposed that the chairman should not also occupy the role of the CEO to reduce agency problems (Jensen, 1993). In contrast to the perspectives of the agency theory, organization theory supports the idea that a vigilant and effective BOD favors CEO duality (Finkelstein & D'aveni, 1994). Also, the theory proposed that CEO duality creates unambiguous leadership and clear lines of authority and responsibility within a company. These features of duality help in facilitating effective decision making. On the other hand, Finkelstein and D'aveni (1994) argued that the non-duality generates multiple authority relations that encourage role disputes among top managers.

Moreover, Miller and Friesen (1977) suggested that unsuccessful companies do not have strong and unified leadership; in such firms, the non-duality of power taking any decisive actions challenging. Thus, non-duality may generate ambiguity and diffusion of power. Additionally, non-duality weakens and disrupts the ability of a CEO to manage the task environments that his/her organization faces. Hence, the expectation is that vigilant boards value CEO duality because of the clear authority and leadership responsibilities that duality confers to a CEO (Finkelstein & D'aveni, 1994).

Regardless, the insignificant association between EM and CEO duality found in Kasim, Hashim, and Salman (2016) indicated that non-duality does not provide an effective oversight function in restraining EM. This result may be due to the nature of family-owned companies that companies in developing countries such as Malaysia favor and Palestine may share similar ownership characteristics with Malaysia as a developing country. Similarly, Ramdani and Witteloostuijn (2010) said that CEO-duality advances performance for mediocre enterprises**.**

Indeed, the advocates Institutional Theory prefer the dual positions. They justify this situation by saying that duality unifies the management of the firm, which produces stability and continuity to improve BOD functioning (Brickley, Coles, and Jarrell, 1997). Regarding this perspective, companies in Palestine need to be more stable to survive in the unstable situations they often face. Finally, duality could work to restrict the chairman of the BOD as a CEO and imposes effective control on him by the BODs themselves, which leads him to conduct his duties better, thus resulting in a positive result that reduces the EM.

5.5.1.7 Audit Committee Size

Table 5.14 indicates a negative association between AC size and EM according to the coefficient sign at p-value > 10%. Thus, the findings related to hypothesis seven (H07) were not supported because of the insignificant association between EM and AC size in non-financial listed companies in Palestine. Thus, hypothesis seven is unsupported. This result is consistent with Chatterjee and Rakshit (2020), who found no association between the AC size and EM practices in Indian manufacturing sectors.

Nonetheless, the negative sign of the relationship aligns with the tenets of agency theory. The agency theory proposed that an AC is a fundamental monitoring mechanism

that enhances the quality and the credibility of corporate reporting, minimizes the asymmetry of information (Chung et al., 2004), and mitigates irregularities and unreliable disclosure (McMullen, 1996). Similarly, and according to the findings, there is a negative substantial association between AC size and EM of Nigerian listed conglomerate firms. As a result, broader ACs are likely to be made up of competent persons who will be able to formulate useful techniques to incorporate as a guide toward earnings control.

One issue is that many companies in Palestine do not have an AC committee. Indeed, Hassan et al. (2016) study, which was conducted in the Palestine context, showed that only 26% of non-financial listed firms had an AC. Later, this percentage grew to about 48%, which indicates that 52% of Palestinian non-financial listed companies are still without ACs. The absence of AC committees may explain the weak influence of the AC size in deterring managers from engaging in EM practices.

Furthermore, large block holders, typically members of a single family or a group of families, and they heavily influence ACs in Palestinian organizations. So, this influence might appear clearly in the appointment of executive management and AC members based on friendship and strong relationships regardless of their skills and experience. Such groups can wield their clout to impact management decisions and undermine the monitoring and coordination functions of an AC.

To conclude, the PCCG (2009) recommended that a company have an AC with at least three members. But the descriptive analysis in Table 5.5 shows that the mean number of members was 1.48. Thus, many companies still do not have ACs. This finding implies that it would be better for the Palestinian companies to adapt to the PCCG by forming an AC, which may enhance the effectiveness of the role of the AC and then reduce EM practices. Moreover, the result might improve and become

significant if the formation of AC in Palestine moved from voluntary to mandatory formation.

5.5.1.8 Audit Committee Independence

Hypothesis eight (H08) posited a negative relationship between AC independence and EM. The statistical analysis shows a negative but insignificant relationship between AC independence and EM practices at a p-value of more than 10%, as elaborated in Table 5.14. This result reveals that the independence of the AC does not serve a significant role in supervising the process of financial reporting. Thereby, hypothesis 8 is not supported. The finding of this research illustrates that non-executive directors serving in the AC are not too effective in reducing EM practices. Nonetheless, this sign of the result does align with the perspectives of agency theory that proposed the non-executive directors are essential to enhance the effectiveness of the AC committee monitoring functions to reduce agency problems between agents and principals (Fama & Jensen, 1983a)

Furthermore, the result of this variable does align with some prior studies, for example, Peasnell et al. (2005), Rahman and Mohamed Ali (2006), Chatterjee and Rakshit (2020), and Khalil and Ozkan (2016). Peasnell et al. (2005) carried out their study in the United Kingdom. The study found no adequate evidence supporting the view that the presence of AC was related to lower levels of EM. Also, Rahman and Mohammed Ali (2006) found evidence of a negative but not significant relationship between EM proxied by DAC and AC independence in Malaysia. The fact that AC had an insignificant role in reducing EM levels shows that establishing an AC in registered firms in Malaysia has yet to attain success in its monitoring.

The weak relationship between non-executive directors and EM in the Palestinian setting could be due to two reasons. First, the establishment of AC in Palestine remains voluntary in the non-financial listed companies according to the recommendations of PCCG (2009). Second, the code of CG in Palestine has not been reviewed since it was issued in 2009. For these reasons, establishing an AC in Palestinian non-financial listed firms have not yet achieved success in its monitoring role.

In this regard, Chatterjee and Rakshit (2020) carried out their study in India, and they found an insignificant and negative relationship between the independence of the AC and EM. Moreover, Khalil and Ozkan (2016) investigated the role of AC independence in constraining EM practices in non-financial listed Egyptian companies from 2005 to 2012. They found that boosting the ratio of non-executive directors on AC might not be enough to constrain EM practices. They argued that Egypt was characterized by high concentrated ownership and weak shareholder protection and that, for these reasons, the monitoring function of non-executive directors in AC might be impaired. Palestinian listed companies may share similar characteristics with Egyptian companies, and this might be a possible explanation for why non-executive members in AC are not effective in mitigating EM practices in Palestine.

Accordingly, Khalil and Ozkan (2016) also concluded that the weakness of CG systems in emerging economies might relate to insufficient law application and the poor legal protection afforded minority shareholders. They believed that Egypt needed to enforce minority shareholders' rights and that cumulative voting to allow minority shareholders to elect their representatives should be adopted. Palestine may share similar circumstances with Egypt.

5.5.1.9 Audit Committee Financial Expertise

The result of testing hypothesis number nine (H09) found a positive relationship between AC financial expertise and EM at p-value > 10% in Palestine. So, Hypothesis number nine in this study is rejected.

This finding implies that financial experts on an AC serve an essential role in Palestinian non-financial listed companies. This finding means that increasing the number of directors who have a financial background will increase the level of EM. Relatively speaking then, AC financial experts are not effective enough in restricting managers from practising opportunistic behavior that leads to a decrease in the quality of financial reports and thus increases the level of EM practice in Palestine.

This finding is contradicting with agency theory that indicates an AC that includes more financial experts can monitor and improve the quality of financial reports. Furthermore, this finding does not align with the recommendations of the PCCG (2009) that ACs should contain at least one member with relevant financial experience so that they are effective in monitoring the process of financial reporting.

Similarly, Yang and Krishnan (2006) conducted their study of 896 companies in the United States between 1996-2000. They provided evidence that increasing governance expertise is positively associated with EM. Alghamdi (2012) found an insignificant association between AC financial expertise and the level DAC in Saudi Arabia. Relatedly, Habbash, Sindezingue, and Salama (2013) found no significant association between absolute values of DAC and AC financial expertise**.** Similarly, Rahman and Mohammed Ali (2006) also found no association between EM level and AC members' competence.

Accordingly, the result of the present research is consistent with Carcello, Hollingsworth, Klein, and Neal (2008), which examined the impact of AC financial

expertise on abnormal discretionary expenses. The study found that AC financial expertise had a positive association with abnormal discretionary expenses for companies with a weak CG system. Further evidence that supports the results of the current study comes from Velte and Stiglbauer (2011), which has stated that independent financial experts do not lead to a higher quality financial report if less than 50% of the members on the AC are independent financial experts.

In this regard, the result of the current study is consistent with the arguments mentioned above according to the descriptive analysis in this current research, which shows that 30% of the members are financial experts, while the independent directors are 34%. This may drive to an explanation that the financial experts are not adequately independent to perform their duties effectively in Palestine. Bilal et al. (2018) supported this, arguing that managers are less likely to engage in EM when companies are comprised of more independent directors with financial expertise and knowledge.

5.5.1.10 Ownership Concentration

The results of testing the tenth hypothesis (H10) show a positive and insignificant association between ownership concentration and EM practice in Palestine at p-value > 10%. Otherwise, the results of the third model demonstrated that there is a positive and significant association between EM and ownership concentration at P-value below 5 per cent. Thus, hypothesis number ten is accepted according to the third model. Relatively, the positive relationship means that a boost in ownership concentration might lead to an increase in the level of EM in Palestine. Therefore, this result is aligning with the agency theory perspective, which suggested that concentrated ownership may lead to a conflict of interest between minority and majority shareholders, as the majority may intend to confiscate corporate resources for their interests (La Porta et al., 1999;

Shleifer & Vishny, 1986). So, the finding of ownership concentration and its relationship with EM signifies that there is a problem in ownership structure in Palestine which make it weak in mitigating EM activities. So, the ownership structure in Palestine should be dispersed to be more effective in preventing EM practicing in order to fulfil the main goals of shareholders.

Accordingly, this result aligns with studies that have been conducted in Palestine, such as Abdelkarim and Alawneh (2009) and Dwaikat and Queiri (2014). Abdelkarim and Alawneh (2009) found that ownership concentration was negatively related to firm financial performance in Palestine. Dwaikat and Queiri (2014) investigated the association between OS and financial performance of 31 companies listed on PEX from 2008-2012. The results showed that ownership concentration was negatively related to a firm's financial performance. Furthermore, Hassan et al. (2016) suggested that ownership concentration might generate conflict because of the creation of agency problems in Palestine.

Accordingly, there is evidence from Kenya, which may be similar to the Palestine context. Outa, Eisenberg, and Ozili (2017) found that ownership concentration did not function efficiently in reducing the practice of EM. The study added that the failure of ownership concentration to mitigate EM might demonstrate the problems between minority stockholders and majorities due to a lack of minority protection in Kenya. The situation in Kenya may be like that in Palestine because non-financial companies in Palestine lack minority protection, and Palestine has an unstable political environment.

Consistence with the result above, Saona (2020) added evidence from Spain, which found that an insignificant association between concentrated ownership and EM as a tool of manipulation of the financial reports. When ownership concentration increases, EM also increases.

Moreover, Fan and Wong (2002) said that the concentrated ownership had a negative impact on the quality of earnings reported. Additionally, Yunos et al. (2011) showed that ownership consolidation was related to lower levels of conservative accounting. Similarly, Guerrero-Villegas et al. (2018) argued that the concentration of ownership might increase disputes between majority and minority stockholders. Accordingly, a fundamental conflict between managers and owners will be transferred to a conflict between stockholders and their counterparts in the company. In Tunisia, Klai and Omri (2011) reported that ownership concentration reduced the faithfulness of financial reports in the companies listed in the Tunisian Exchange.

Another possible explanation of this positive association is that the performance of PEX is still developing. Policymakers and investors are still concerned with governance, disclosure, and the efficiency of PEX. Another issue is the high degree of ownership concentration in the Palestinian corporations traded (PEX, 2018). It is widely perceived that this observable fact has negatively affected the fair pricing of stocks and weakened confidence in the PEX, which might lead to concentrated ownership in Palestine.

5.5.1.11 Institutional Ownership

The finding related to hypothesis H11 revealed a negative and significant association between institutional ownership and EM practice in Palestine at p-value < 5%. Therefore, evidence exists to accept hypotheses 11. Relatively, the significant and negative relationship means that increasing the percentage of the institutional ownership may lead to mitigate the magnitude of the level of EM in Palestine. According to principles of the agency theory, institutional ownership usually boosts the monitoring system in controlling the opportunistic behaviors of management (Ping & Wing 2011).

Moreover, institutional owners may practice a strong monitoring function to control opportunistic management behavior (Shleifer & Vishny, 1986). Accordingly, institutional ownership may lead to the minimization of agency problems, which might protect minority stockholders (Naser et al. 2006) and strengthen monitoring on the performance of the firm (Crutchley et al., 1999).

The result of this hypothesis is consistent with prior literature, which has reported that institutional investors tend to infuse their money in the companies with a high level of BOD independence (Al-Jaifi, 2017). Along the same line, Bao and Lewellyn (2017) argued that institutional investors are rational and sophisticated owners; thus, they can analyze a company's performance correctly and detect accounting misreporting efficiently. Furthermore, Anwar and Buvanendra (2019) have presented evidence from Sri Lanka that they found institutional ownerships are effective in mitigating EM.

. In Palestine, Hassan et al. (2016) reported a high proportion of institutional shareholders positively affected firm financial performance, thus, minimizing agency costs. This result aligns with the finding of this research that there is an inverse association between EM and institutional ownership. Additionally, Farouk and Bashir (2017) detected a negative association between EM and the proportion of institutional ownership. In Jordan, Almasarwah (2015) found that a boost in the proportion of institutional ownership led to a lower magnitude of DAC. Furthermore, Bao and Lewellyn (2017) documented an inverse association between institutional ownership and EM activities.

5.5.1.12 Foreign Ownership

The finding of investigating hypothesis H12 revealed a significant and positive relationship between foreign ownership and EM practices in Palestinian non-financial

listed firms at p-value < 10%. Thus, the hypothesis is supported. Relatively, the significant and positive associations mean that increasing the percentage of foreign ownership may increase the level of EM practices in Palestine.

This result does not align with the propositions of agency theory. Agency theory suggests that foreign ownership will lead to enhanced monitoring functions in the business. (Jensen & Meckling, 1976); therefore, foreign ownership ought to affect EM negatively. Nonetheless, this study found a positive association between foreign ownership and EM practices in Palestine.

This result is consistent with some prior studies that have been conducted in the Middle East, Africa, and Southeast Asia. For example, Farouk and Bashir (2017) found that foreign ownership had a significant and positive influence on EM activities in Nigerian listed companies. Almasarwah (2015) found that both foreign institutional and individual ownership was significantly and positively related to EM in Jordan. This means that higher foreign ownership appears to be associated with more EM. Additional evidence from Jordan by Alzoubi (2016) found that companies with less foreign ownership were more likely to engage in EM. Ji et al. (2015) provided evidence from China that an insignificant association existed between the level of foreign ownership and earnings quality. Another evidence from Chain presented by Kim et al. (2020) found that foreign ownership in H-share companies from 2003 to 2015 impact positively on EM. Moreover, Anwar and Buvanendra (2019) found that foreign ownership was positively associated with the magnitude of EM.

A possible explanation for this result is that concentrated ownership in Palestine negatively impacted the performance of firms listed and limited, attracting more foreign investors to invest in the Palestine Exchange. As a result, the Palestinian economy suffers from a liquidity shortage, and this shortfall will lead to an absence of confidence

in the Palestine Exchange. Consequently, the Palestinian economy must open companies up to attract additional foreign investment and, thereby, improve the effectiveness and quality of corporate governance systems (Abdel Karim & Alawneh, 2009).

Although PEX's performance has evolved over the past two decades, the exchange still needs crucial reforms in CG issues and disclosures (Hassan et al., 2016). Accordingly, this reported finding aligns with Saleh et al. (2018), who conducted their study in Palestine. They found that increasing the proportion of foreign ownership is likely to lower a firm's financial performance in Palestinian non-financial shareholding companies. Furthermore, Saleh et al. (2018) have also argued that political instability in Palestine may be one of the main obstacles facing foreign ownership in playing a positive role in shareholding companies. So, a potential explanation for this result is that the negative role of foreign ownership in reducing EM may be due to the unstable political situation in Palestine, where the environment is not encouraging for foreign investors.

Another possible explanation that those foreign investors do not have financial resources, managerial know-how, and CG expertise that ought to have to provide them with an advantage over other owners in monitoring insiders and the reported earnings. This argument is supported by the explanations of the study of Farouk and Bashir (2017). Relatedly, foreigners may only be interested in short-term earnings. Lastly, foreign ownership has been found to increase EM in the Palestinian non-financial shareholding companies. Therefore, this kind of ownership ought to be given close monitoring while on the board as their presence may motivate management to engage in EM just to signal that the company is doing well.

5.5.1.13 Control Variables

This study addresses three control variables due to their potential relationships with EM practices. These variables are growth, firm age, and cash flow from operating activities. Many previous studies of CG and EM have addressed these variables. Table 5.10 illustrates the findings of these control variables.

5.5.1.13.1 Firm Growth

Many of prior studies showed inconclusive results of the influence of the growth of the firm with EM; measured by the change in total assets to a certain year scaled by the lag of total assets of the firm year (Abbott et al., 2004; Johl et al., 2013; AbuSiam et al., 2018). In this research, the influence of a company's growth (AGROWTH) and EM were positively associated with a p-value <1%. This result reveals that managers might utilize their discretion regarding EM tools to avoid expected reporting negative growth rates that could impact their bonuses. This finding is consistent with some prior literature such as Kim and Yoon (2008), Idris (2012), and AbuSiam et al. (2018) that documented that the rate of firm growth had a positive and significant association with the level of EM. To sum up, some previous empirical studies showed that firms with better growth rates have good opportunities to engage in EM (Moslemany & Nathan, 2019).

5.5.1.13.2 Firm Age

Firm age is the second control variable addressed in this research, and previous studies have taken this variable to control the relationship of CG with EM and also firm performance (e.g., Shan, 2015; Bassiouny, 2016; Black, Carvalho, Kim, & Black, 2018;

Fang, 2016; Moslemany & Nathan, 2019). Firm age is commonly measured by the number of years since a firm was established (Shan, 2015).

This current study found a negative association between firm age (FIRMAGE) and the magnitude of DAC at p-value <1%. Black et al. (2018) and Bassiouny (2016) both concluded that as time passes, companies behave more wisely and gain more experience. These factors will lead companies to speed up their production processes and mitigate expenses and improve quality. Furthermore, firms that have been listed for a long time in the bourse might tend to practice EM at the lower level rather than beginners in the stock market. A possible explanation of the result of the firm age in this study is that companies which been established for a long time are well-known, have great value in the market, and they have a good reputation. Also, they are aware of the code of CG rules. So, the older firms practice and engage in less EM in the Palestinian non-financial listed companies on PEX.

5.5.1.13.3 Cashflow from Operating Activities

Cash flow from operating activities (CASH FLOW) is the last control variable addressed in this study to control the association between CG characteristics and EM. CASHFLOW is widely used as a control variable in this kind of research. The result of this variable reveals a significant and negative relationship between CASHFLOW and EM practice in Palestine. That means that increases in the percentage of CASHFLOW lead to a lower level of EM. This finding is consistent with many past studies (e.g., Carcello et al., 2008; Habbash, 2010; Johari, Saleh, Jaffar, & Hassan, 2009; Masud, Anees, & Ahmed, 2017). Masud et al. (2017) showed that those with more CASHFLOW were associated with less EM practices. Similarly, Habbash (2010) found that Cash Flow from operations was significantly and negatively related to EM at a p-

value equal to 1%. Johari et al. (2009) found that CASHFLOW was negatively associated with EM in Malaysian listed companies. Jacoby, Li, and Liu (2016) argued that financially troubled companies were driven to practice more EM to avoid the expected negative impact of financial distress.

5.5.2 Moderation Random Effects Regression Model

Table 5.15: Results of Panel Regression of Moderation Models

Variables	Moderation Model		VIF
	Coef.	P-value	
AGROWTH	0.231	0.003***	1.12
CASHFLOW	-0.280	0.047***	1.11
FIRMAGE	-0.013	0.148	1.17
BODQUALI	0.045	0.083*	6.62
ACQUALI	-0.026	0.079*	2.15
POLINS	0.025	0.027**	3.13
BODQUALI*POLINS	-0.069	0.009***	7.82
ACQUALI*POLINS	0.007	0.717	2.27
_cons	0.097	0.007	
R-square	0.378		Mean VIF=
Chi2	157.09		3.18
Prob > F	<0.01		

Notes: ABSDAC = The absolute value of DAC calculated by the model of Kothari et al. (2005). GROWTH = The change in total assets scaled by lagged total assets. CASHFLOW = The net cash flow from operating activities scaled by total assets. FIRMAGE = The number of years since the firm is established. POLINS = Equals one (1) for the yeas 2011 to 2014, representing the severe political instability and zero (o) if otherwise. BODQALI = is restricted by "0-1" with a higher score indicating higher effectiveness or quality of the BODs. ACQUALI = is restricted by "0-1" with a higher score indicating higher effectiveness or quality of the ACs.

According to the global chi-square test, the model was significant, and the model explained 37.2% of the information in the data. Like the previous main model, all control variables were significantly related to the EM response variable, except firm age (FIRMAGE). Political Instability (POLINS) was used as the moderation variable to investigate the moderation effect on the association between EM and BOD and AC Quality. The interaction terms between POLINS & BOD Quality

(BODQUAL_POLINS) and POLINS and AC Quality (ACQUALI_POLINS) were used to examine the effect of moderation. Based on the model estimates, a significant moderation on the relationship exists between the EM and BOD effectiveness at a 0.10 significance level. However, the ACQUALI had a significant and negative association with the EM, while BODQUALI had a significant and positive association with EM.

5.5.2.1 Board of Director Quality

BOD Quality is considered one of the independent variables representing BOD effectiveness. BOD quality was measured by a composite score generated by using the group of BOD characteristics, which have been addressed in the main model in Table 5.14. The aggregate measure of the BOD quality was constructed to investigate its influence on EM in the Palestinian non-financial listed companies on PEX. The measurement of the BOD effectiveness index addressed in this study was based on the literature (Makhlouf, 2017; AbuSiam, 2015; O'Sullivan et al., 2008; Hoitash et al., 2009; Goh, 2009; Ishak & Al-Ebel, 2013). O'Sullivan et al. (2008) argued that combining overall CG mechanisms in one measurement might give a more robust and more comprehensive effect than individual effects. Accordingly, this study is first using the quality of the BOD as an aggregate measure in the Palestinian context.

The results of the Random Effects Regression Model in Table 5.15 elaborated on the finding of the relationship of BOD quality as an aggregate measure rather than as individual characteristics of BOD with EM practices in Palestine. Table 5.15 shows a positive relationship between BOD Quality and EM practices at p-value < 5%. This result was unique, unusual, and not as expected. So, the positive sign, as the estimated coefficient shows, indicated a strong association between BOD quality and EM. Hence,

H13 was unsupported and rejected. The estimated coefficient implies that a boost in BOD quality by 1% will lead to an increase in EM by .063%.

BOD is an essential organ of the organization, and it exists to monitor and control management behaviors and actions. Thus, the BOD quality plays a vital role in overseeing the quality of financial reports and confirming the credibility and reliability of these reports (AbuSiam et al., 2014b). The result of BOD quality in this current research is inconsistent with some previous studies (Dhaliwal et al., 2007; Ishak & Al-Ebel, 2013; O'Sullivan et al., 2008; AbuSiam, 2015). For example, Dhaliwal, Naiker, and Navissi (2006) determined that the strength of BODs results in maximizing accruals quality. O'Sullivan et al. (2008) found that the effectiveness of BOD as a composite measure was positively associated with voluntary disclosure. Furthermore, Ishak and Al-Ebel (2013) indicated that when the BOD effectiveness score increased that this led to a boost in the level of the disclosure of intellectual capital in the annual reports of banks.

A possible explanation for this result is that PCCG was released by 2009, and there is still a weak level of compliance by listed companies in applying its rules, especially in listed non-financial companies. (Anastas, 2017). PEX (2016) has documented that just the banking and insurance sectors adhere to a good level of compliance with the CG code because of direct and constant supervision on behalf of the Palestinian Monetary Authority (PMA). On the other hand, the services sector was the least compliant with the PCCG rules (Anastas, 2017).

Additionally, the result of BOD Quality in this study is consistent with the study of Hassan (2016), which found that financial performance was negatively related to CG effectiveness. This finding is inconsistent with the agency theory perspective. Hassan (2016) added that CG in Palestine is still in a primitive and undeveloped stage.

According to the arguments above, this result illustrates that there is a problem in the CG structure in Palestine, which needs to be solved. Hence, PEX must make numerous reforms to the Corporate Governance Code and motivate Palestinian shareholding companies to be more in compliance with its rules.

To conclude, Makhlouf et al. (2018) pointed out that the presence of members of the BOD belonging to the family that owns the company weakens the effectiveness of the Board of Directors, and this would weaken the relationship between the BOD quality and firm performance. The negative association between BOD effectiveness and firm performance in Jordan may be because family members are working to serve their interests and ignoring the interests of the firm and minority stockholders, which leads to inflating agency conflicts. More simply put, family members are utilizing their positions to consolidate their control, which, in turn, leads to higher agency costs (Makhlouf et al., 2018).

Palestine shares geographic and economic characteristics with Jordan, so the findings of Makhlouf et al. (2018) may be a good explanation of this study result that BOD Quality has a positive relationship with EM practices in Palestine. Moreover, the positive relationship could be because of the nature of the composition of BODs in Palestine, where major shareholders control most boards. In turn, this might lead to the appointment board members based on favoritism instead of experience, knowledge, and skills. Such members may utilize their clout to impact management decisions and undermine the monitoring and coordination of the board. This would render the board impotent relative to its impact on management and firm performance.

5.5.2.2 Audit Committee Quality

AC Quality reflects the effectiveness of AC, which proxied by a composite score measurement in this study. Three characteristics of AC generate the score using the points highlighted in the main model in Table 5.14. To investigate the impact of AC quality on EM practices in the Palestinian organizations, the aggregate measure of the AC quality was established. The dimension of AC effectiveness as an aggregate measure is based on prior literature (eg., Al-ebel, 2013; Dhaliwal et al., 2007; Goh, 2009; Makhlouf, 2017; Kent, Routledge, & Stewart, 2010; O'Sullivan et al., 2008; AbuSiam, 2015). Accordingly, the current study was the first study in Palestine to investigate AC effectiveness as a composite measure to investigate its relationship with EM practices.

Table 5.15 shows that AC quality was correlated negatively and significantly with EM in Palestine at $p < 5\%$. This result shows a strong relation between AC quality and the level of DAC. Hence, hypothesis 14 is accepted. Based on the estimated coefficient, an increase in AC Quality by 1% will lead to decrease in the EM level by approximately 0.301%. The study supported the observation of this factor done in the context of Palestine by Alia et al. (2020). By using Kothari et al. (2005) to calculate the magnitude of EM, they found that the existence of AC is inversely correlated with EM practices at the significant level in the Palestinian shareholding firms listed in PEX. This means that AC still plays an essential role in reducing EM activities in the companies that form this committee according to the PCCG (2009) recommendations.

The finding of the study is consistent with the assumptions of agency theory. This theory says that more AC quality and effectiveness leads to improve the financial reporting quality and credibility. An AC is a critical factor in a firm because of its monitoring duties, which leads to the assurance that financial reports are faithful and

accountability are enhanced (Mohamed & Ragab, 2014 & Carcello & Neal, 2003). There are a good number of characteristics that contribute to enhancing the quality of an AC. For instance, this includes the existence of both financial experts and independent directors (Shawtari et al., 2015 & DeZoort et al., 2002). Furthermore, an effective AC plays a pivotal role in reducing agency problems by mitigating the information asymmetry between shareholders and management, and, thus, leads to the reduction of the level of EM (AbuSiam et al., 2018; Garcia-Torea et al., 2016; Habbash et al., 2013).

Similarly, the observation of AC quality and its association with EM is consistent with Zgarni, Hlioui, and Zehri (2016). They examined the impact of AC effectiveness and the quality of the external audit. They constructed an index to investigate the effectiveness of AC. They based their study for the AC on five characteristics (AC existence, financial expertise, independence, meeting frequency, and size). Based on empirical evidence, they found a supplementary relationship between an effective AC and the specialization of the external auditor, which, in turn, alleviated EM in Tunisian listed firms.

In addition, Habbash (2010) indicated that ACs restrict EM when overall characteristics are examined simultaneously. This means that an AC, which consists of least three directors, all of whom are independent, includes at least one financial expert and meets at least three times annually, may restrict EM. DeZoort et al. (2002) suggested that AC effectiveness should be combined in a group to measure the quality of an AC. Ward et al. (2009) have said that future studies should examine the characteristics of CG as a set rather than as individual characteristics to produce better results. Accordingly, the aggregate measure of AC quality in this study provides a comprehensive understanding of the effectiveness of AC in Palestine, which single

characteristics might not indicate. Consequently, the results of this present study indicate that the quality of the AC had some importance in mitigating EM in Palestine.

5.5.2.3 Political Instability

Political instability was addressed as an independent variable and investigated its influence on EM practices in Palestine. The dummy variable was a proxy of political instability and was coded "1" for the period from 2011 to 2014 and "0" if otherwise. Political instability was addressed in this study due to the environment in Palestine, which is characterized by a highly unstable political environment. Moreover, the performance of the shareholding companies listed on PEX has negatively responded to political instability, like the wars launched on Gaza by Israel in 2012 and 2014 also (PEX, 2018). Furthermore, the findings of this current study show a significant and positive correlation between EM and the political instability at p-value < 10%. This means that managers are more likely to practice EM during times of severe crisis and an unstable environment due to the political situation in Palestine. Accordingly, the estimated coefficient elaborated that when political instability increased by one point, the EM level increased by 0.023 points.

This finding aligns with the perspective of the positive accounting theory that Watts and Zimmerman (1978) and Watts and Zimmerman (1986) presented. The theory proposed that managers of a firm face several political factors that influence their decisions. These factors lead managers to manipulate reported earnings (Watts & Zimmerman, 1978). Understandably, companies usually engage in EM because of legislative, political, and regulatory conditions during periods of increased political actions (Watts and Zimmerman, 1986).

Such a finding is consistent with several past investigations that have addressed financial crises and political environment and their influences on EM (e.g., Attia, et al., 2016; Hsiao et al., 2016; Obaidat 2017; Habib et al., 2013 & Harymawan & Nowland, 2016). Hsiao et al. (2016) found that gas and oil firms in the United States practiced EM during the Arab Spring. Also, Obaidat (2017) reported that Jordanian firms tended to practice more income smoothing in periods of political instability. Similarly, Ahmad-Zaluki, Campbell, and Goodacre (2011) found that the Malaysian IPOs practiced income-increasing EM during crises that occurred in East Asian countries at the end of the 20th century.

In Palestine, the performance of firms listed on PEX has been negatively impacted by the political instability because of the wars in the Gaza strip that Israeli occupations in 2008, 2009, 2012, and 2014 launched (PEX, 2018). The Arab revolutions, which occurred in 2011, have left negative impacts on the economics of Arab Springs countries. Attia et al. (2016) found that the DAC as an EM proxy increased during the period of severe political instability that was in 2011 in Tunisia from which the Arab Spring sparked. This indicates that the amount of DAC was greater during and immediately after the revolution and that the amount of DAC was lower in the period leading up to the outbreak of the revolution in Tunisia.

Abu Jamia (2013) said that foreign investors fled from the countries that the Arab spring impacted, including Egypt, Libya, Tunisia, and Syria and also Palestine, as the product of the political situation. Lastly, he suggested that the law, regulations, and CGs should be reorganized to offer more protection to shareholders to attract additional local and foreign investors to enter the Palestinian private sector. These actions may mitigate the negative consequences of political instability in Palestinian corporations. So, good

CG and effective BODs should be a pivotal tool to deter managers from engaging in more EM in the unrest political environment such as Palestine.

Political instability played a role of moderating interaction between BOD quality and AC quality to investigate whether they play an effective function during severe political instability to constrain managers from practising critical levels of EM in non-financial companies. Finally, whether political instability as a moderating factor has a significant impact on the association of the quality of the BOD and AC was examined. This relationship was elaborated upon in Table 5.15 and is discussed in the following sections.

5.5.2.4 Political Instability on the Relationship of BOD Quality and EM

Regarding the interaction between political instability and the quality of the BOD (BODQUALI*POLINS), Table 5.15 showed that the beta coefficient for the interaction between political instability and the quality of BOD was significant and negative at p-value < 5%. This result indicates that the association between BOD quality and EM becomes strong when political instability is immensely high in Palestine. Therefore, H16 was supported. Political instability moderates the association between BOD quality and EM. The result shows that during high instability, BOD was excessively strong in deterring managers from engaging in exceedingly EM. In other words, the role of the BOD quality during severe political instability may constrain EM practices. A possible explanation for this result is that when political instability is relatively high, BODs of Palestinian shareholding companies are stronger than during periods of light political instability. Accordingly, another possible explanation is that BOD quality was effective in controlling the level of EM practices, and the government of Palestine supports private-sector corporations during a severe crisis and facilitates the opening of Gaza

Strip markets to some West Bank products (PEX, 2013). Lastly, CG might provide a substitute for regulations during a severe political crisis to protect businesses from any opportunistic behaviors. Thus, BOD was effective in deterring managers from engaging in EM during the period of severe political instability in the non-financial companies listed on the PEX.

This result is consistent with the tenets of political theory, which is associated with Gourevitch (2003), Pagano and Volpin (2005), and Roe (2003). They argued that the political environment in any country determines the magnitude of the managerial agency costs that stockholders are supposed to sustain. Roe (2003) suggested that the political environment in a country also determines the legal system. Thereby, the legal system quality determines the rights of stockholders and how to protect these rights. Roe (2003) also argued that stockholders might reform the structure of CG systems to mitigate the negative consequences of threats generating by political and economic instability. For instance, firms may tend to reform the BOD to be more active during a period of extreme political instability (Mangena et al., 2012). Accordingly, the arguments above support the notion that BOD quality plays a positive and decisive role in deterring management from engaging in a critical level of EM during the period of political instability in the Palestinian context.

Some scholars have said that governments serve an essential role in defending the interests of individuals seeking to attain their objectives (Okun, 1970; Shapiro, 1986). Williams (1999) argued that government intervention was quite advantageous in the face of market failures like externalities, imperfect competition, and instability. Thereby, governments might seek to protect the rights of individuals (Grimaldi, 2019).

The adverse effects of an unstable environment on the economic track, the continued political stalemate, and the internal divisions have hindered the growth of

economic sectors in Palestine. Furthermore, the continuing financial crisis of Palestine and the scarcity of external support funds contributed to the slow growth, all because of restriction of the Israeli Occupation on the Palestinian economy and its control over the crossings and borders, the Gaza blockade, and the ongoing wars. In the contest of continuing political and economic crises, with a dysfunctional legal system, a different set of CG mechanisms might need to be developed that are appropriate in responding to the resulting agency problems and improve firm performance and mitigate EM.

5.5.2.5 Political Instability on the Relationship of AC Quality and EM

The results provided in Table 5.15 show that the interaction between political instability and the quality of AC was insignificant at p-value > 10%, and the coefficient sign for this interaction process was positive. To specify the real effects of political instability on the relation between AC quality and EM, this research compared the coefficient of the AC quality (ACQUALI) in Table 5.15, which illustrates that the coefficient of (ACQUALI) was -0.031, while the beta coefficient of ACEQUALI*POLINS was 0.009, shows that the beta coefficient of interaction process of ACQUALI*POLINS compares with ACQUALI beta coefficient. The finding supports the conclusion that the effectiveness of AC on EM was weak when moderating of political instability. Therefore, hypothesis 17 was supported because the political instability plays a moderating role between the relationship AC quality and EM in Palestine.

The weak influence of AC quality during political stability is constant with some previous studies. For example, Ahmad-Zaluki et al. (2011) found that Malaysian IPOs practiced EM by income-increasing during the well-known financial East Asian crisis. Furthermore, Hsiao et al. (2016) found that petroleum companies in the United States

practiced more EM in the course of the Arab Spring. Moreover, Obaidat (2017) showed that companies were more likely to practice earnings smoothing in a political crisis.

Conversely, BOD quality was more operative in controlling managers to engage at a high level of EM. Possibly, the BOD substituted for the AC role throughout the crisis in Palestine from 2011 to 2014. That might be an outcome of the voluntary creation of an AC in the Palestinian CG code (PCCG, 2009). The voluntary formation of AC in non-financial listed firms on PEX may weaken the role of AC in a situation of unstable political conditions.

Accordingly, Awrtani (2013) provided another possible explanation of this result in his study that evaluated the effectiveness of CG in Palestinian firms. He documented that that 47% of the listed companies on PEX had no AC. The absence of the committees may demonstrate weakness in AC quality under unstable political conditions. Madi (2012) suggested that a concentrated ownership structure could lead to more severe agency problems because of information asymmetry between majority and minority stockholders. Therefore, an ineffective AC during a period of political instability cannot reduce agency problems due to concentrated ownership.

5.6 Additional Analysis

This study conducts three additional analysis for the reason to check the robustness and make deep and comprehensive understanding of the EM and CG issues in Palestine. These analyses will be illustrated in the following sections.

5.6.1 Using Different Proxies for CG Variables

The PCCG (2009) made several recommendations to motivate companies listed on PEX during the formation of BODs and ACs. Abu Siam (2015) used several proxies

for some CG variables according to the Jordanian CG code (2009) to implement further tests and check robustness. Following in his footsteps, the present study used several proxies for each of the following BOD and AC variables that were related to recommendations provided in the PCCG (2009). These were as follows:

BOD Meetings: Because PCCG (2009) recommended that a BOD of listed firms should meet at least six times yearly, the present study measured the number of BOD meetings as a dummy (BODMEETD). This variable was coded "1" if the BOD conducted six meetings or more annually and "0" if otherwise.

BOD Independence: In this current study, the percentage of non-executive members on the BOD was used as a metric to measure BOD independence. According to the PCCG (2009) that recommends in Article 28 of the PCCG (2009) said, “It is preferable that the BOD members may not practice any executive functions in the company.” Based on this recommendation, BOD independence was measured in this additional analysis as a dummy (BODINDEPD) that coded as "1" if 100% of the BOD members were non-executives and "0" if otherwise.

BOD Nationality Diversity: In this current study, BOD nationality diversity was measured by the proportion of foreign members in the BOD. Article 29 of the PCCG (2009) advises that “BOD members should possess diverse experiences to enable BODs to fulfil their duties objectively and efficiently.” Accordingly, BOD nationality diversity was measured in this analysis as a dummy (BODNDD) that was coded as "1" if BOD had at least one foreign director and "0" if otherwise.

CEO-Nonduality: The PCCG (2009) states that the board chairman should not hold an executive job in a company to improve discussions and disperse responsibilities instead of concentrating them in one person's hand. Furthermore, this is better for accountability reasons because a chairperson who is also the CEO cannot question

himself. So, following this recommendation, CEO-nonduality was measured in this additional analysis as a dummy variable (CEO-NONDUAL) that was coded as "1" if the roles of chairman and CEO were separated and "0" if otherwise.

AC Independence: The PCCG (2009) recommended that an AC should have at least two independent members. So, this present study measured AC independence as a dummy variable (ACIDEPD), which was coded with a value of "1" if at least two of the members AC were independent and "0" if otherwise.

AC Financial Expertise: The PCCG (2009) provided recommendations regarding AC financial expertise. The code suggested that at least one member of the AC should be qualified with financial and accounting. Therefore, this study measured AC financial expertise as a dummy variable (ACFEXPD), taking the value of "1" if at least one member of the AC had financial experience and "0" if otherwise.

The goal of using these different proxies for some CG characteristics are: The first was to confirm the robustness of the results by using alternative proxies of BODs and ACs. The second was to assess the efficiency of PCCG (2009) recommendations in monitoring the executive management to improve the credibility of financial reporting. Moreover, another reason was to assess the extent to which non-financial company implement the recommendations of PCCG (2009).

Table 5.16 provides the new results based on the changing on some measurements of BOD and AC variables by using the same dependent variable, which was the absolute value of discretionary accruals that Kothari et al. (2005) calculated and all other independent and control variables, which were not changed.

In general, the results in Table 5.16 were consistent with the main results, which found a significant relationship with EM, including BODNDD, BODRE&GC INSTIOWNER, and FOREOWNER. On the other hand, two findings changed from a

significant to an insignificant relationship with EM, which were BODINDEPD and BODMEET. Interestingly, the coefficient signs of the relationships of independent variables with EM were in the same directions. The results illustrated also reveal similar findings in which the insignificant variables (BDSIZE, ACSIZE, ACINDEPD, ACFEXPD, and OWNERCONC) and the directions of the associations remained the same as well, except (CEO-NONDUAL), which had a positive and insignificant relationship with EM**.**

Table 5.16: Pooled OLS Regression Results of New BOD and AC Proxies

Variable	Coef.	P-value
AGROWTH	0.219	0.004***
CASHFLOW	-0.249	0.010***
FIRMAGE	-0.026	0.001***
BODSIZED	-0.0007	0.655
BODMEETD	-0.012	0.173
BODINDEPD	-0.009	0.520
BODNDD	-0.019	0.041**
BODRE&GC	-0.018	0.013**
CEO_NONDUAL	0.019	0.179
ACSIZE	-0.004	0.394
ACINDEPD	-0.003	0.802
ACFEXPD	0.015	0.178
OWNERCON	0.042	0.271
INSTIOWNRER	-0.067	0.062*
FOREOWNRER	0.035	0.043**
_cons	0.183	<0.001
R-square	0.4778	
Adjusted R-square	0.4415	
F-stat	3.01	
Prob > F	<0.001	

Notes: ABSDAC = Absolute value of DAC computed by Kothari et al. (2005), AGROWTH= Annually firm growth. CASHFLOW = Chas flow from operating activities scald by lag total assets, FIRMAGE = the numbers of the year of the company since establishment, BODSIZE = the total number of BOD members, BODMEETD the annual number of BOD meeting times; BODINDEPD = Dummy Variable codded "1" if the company have 100% non-executive directors and "0" otherwise; BODNDD = Dummy variable codded "1" in the BOD have at least one foreign director and "0" otherwise; BODRE&GC = the presence of the committee of remunerations and governance in the company; CEO_NONDUAL= the non-duality role of CEO and chairman; ACSIZE = the total number of AC members; ACINDEPD = dummy variable coded "1" if two-thirds of the AC were non-executive directors and "0" if otherwise; ACFEXPD = dummy variable coded "1" if the AC had at least 1 financial and accounting expert and "0" if otherwise. OWNERCONC = the percentage of share to

total shares held by the block holders who have more than 5% of the total shares of a firm. INSTIOWNER = the percentage of shares to total shares owned by institutional investors and FOREOWNER = the percentage of shares to total shares owned by foreign investors.

To conclude, the results in Table 5.16 are exceptionally crucial to PEX, policymakers, and the PCMA in that they give CG characteristics adequate attention. These findings indicated that BOD nationality diversity, the remuneration and governance committee, and institutional ownership are fundamental mechanisms that play vital roles in mitigating EM practices in the non-financial companies listed in PEX. Consequently, these mechanisms need to receive more attention from PEX, policymakers, and the PCMA to enhance their role in improving financial reporting quality. So, these results revealed that diversity and the governance committee are essential attributes in mitigating EM levels, which, in turn, boost the credibility and reliability of financial reports.

Table 5.16 shows that no significant relationship existed between BOD size, CEO-non-duality, BOD meetings BOD independence, AC size, AC independence, and AC financial expertise, and the practising of EM. These results indicate that some companies were not strongly compliant with the PCCG (2009). This result was supported by Anastas (2017), which indicated that service companies listed in PEX had low compliance with the PCCG (2009).

Indeed, these results should raise the alarm for policymakers, the government, and the PEX to shoulder their responsibilities towards activating the commitment to items of PCCG (2009) and conducting an objective review of it, as it has not been modified from that which was issued in 2009. Also, the majority of PCCG items are still voluntary and not mandatory. Finally, consistent with the main results, the findings of growth, firm age, cashflow has a significant relationship with EM.

5.6.2 Signed Discretionary Accruals Analysis

This study estimates DAC by using the Kothari et al. (2005) model. Furthermore, the absolute value of the DAC was used as the measure of EM, which prior literature widely used (AbuSiam et al., 2018; Alareeni, 2018; Alareeni, 2017; Idris et al. 2018 & Xie et al. 2003). On the other hand, a few studies (Abdullah & Ismail, 2016; Alareeni, 2017; Alsultan, 2017; Habib et al., 2013; Beladi et al., 2020) have addressed the sign of DAC instead of its absolute value.

Therefore, this study also regresses the models separately for positive and negative accruals. So, the direction of the EM could be either income-increasing or income-decreasing. Accordingly, this research utilized a signed DAC to allow potential or local investors to make rational decisions regarding their investment's options. So, the sample of this study was divided into two sub-samples. The first sample comprised firms with a positive DAC, and the second comprised firms with a negative DAC. This division is undertaken to examine if differences exist in the relationships between CG characteristics and DAC based on the sign of engagement in EM. This fundamental analysis could motivate policymakers and the PEX to consider EM practices when reviewing the PCCG (2009).

The signed DAC means that firms may adopt double accounting strategies to practice EM; these are aggressive and conservative accounting strategies. The first strategy is the aggressive accounting that managers use it to inflate the reported income artificially. Inflating these results might lead the stockholders to ask for a high dividend rate, which, in turn, reduces a company's resources (Ines, 2017). This situation does not mirror the actual conditions of the company and might mislead the financial statements users and other stakeholders (Kamarudin, Ismail, & Samsuddin, 2012; Abdullah & Ismail, 2016).

In the second case, managers may tend to behave conservatively by choosing to deflate the reported income; this means that managers underestimate profit and not mislead financial statements users (Ines, 2017). According to Karjalainen (2011), companies may tend to take on a conservative method in engaging in EM to avoid the risk of overvalued assets to stockholders and stakeholders.

The sign of a DAC indicates that a company has chosen aggressive (conservatism) accounting choices or may accelerate (postpone) revenue recognition or delay (speed up) expense recognition (Lin, Hutchinson, & Percy, 2013). Hence, using aggressive accounting options could lead to income-increasing accruals. On the other hand, the conservatism accounting choices that drive income-decreasing accruals. Although both directions could be considered unethical behaviors, the intention to practice income-decreasing EM is more aligned with prudence, while the intention to practice income-increasing EM is more inclined towards misleading the stakeholders (Abdullah & Ismail, 2016). In general, being conservative is more tolerable than being aggressive.

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Table 5.17: Pooled OLS Regression of CG and Signed DAC

Variable	Panel (A): + + DAC		Panel (B): - - DAC	
	Coef.	P-value	Coef.	P-value
AGROWTH	0.160	0.010***	0.058	0.308
CASHFLOW	-0.730	0.000***	-0.380	0.000***
FIRMAGE	-0.014	0.036***	0.016	0.083*
BODSIZE	-0.002	0.310	0.004	0.014**
BODMEET	-0.006	0.014**	0.003	0.161
BODINDEP	0.040	0.470	0.040	0.006***
BODNDD	-0.032	0.266	0.051	0.051**
BODRE&GC	-0.008	0.322	0.021	0.002***
CEODUAL	0.000	0.978	-0.003	0.797
ACSIZE	0.001	0.718	-0.015	0.010***
ACINDEP	-0.007	0.616	0.057	0.004***
ACFEXPD	-0.018	0.341	0.003	0.809
OWNERCON	0.114	0.000***	0.044	0.259
INSTIOWNRER	-0.123	0.000***	-0.018	0.443
FOREOWNRER	0.046	0.003***	-0.033	0.149
_cons	0.125	0.31	-0.182	0.003
R-square	0.835		0.600	
Adjusted R-square	0.815		0.522	
F-stat	15.34		9.91	
Prob > F	0.000		0.000	
Observations	140		92	

Notes: + + DAC = The positive values of DAC computed by Kothari et al. (2005).
- - DAC = The negative values of DAC computed by Kothari et al. (2005).
AGROWTH= Annually firm growth. CASHFLOW = Chas flow from operating activities scald by lag total assets, FIRMAGE = the numbers of the year of the company since establishment, BODSIZE = the total number of BOD members, BODMEETD the annual number of BOD meeting times; BODINDEP = the proportion of the non-executive directors in the BOD; BODND = the proportion of foreign directors in the BOD; BODRE&GC = the presence of the committee of remunerations and governance in the company; CEODUAL= the duality role of CEO and chairman; ACSIZE = the total number of AC members; ACINDEP = the proportion of non-executive members in the AC; ACFEXP = the proportion of financial experts members in the AC; OWNERCONC = the percentage of share to total shares held by the block holders who have more than 5% of the total share of the firm. INSTIOWNER = the percentage of shares to total shares owned by institutional investors and FOREOWNER = the percentage of shares to total shares owned by foreign investors.

Accordingly, the objective of this additional section is to explore what factors of CG affect the signed DAC of the non-financial listed companies in PEX. Few studies have addressed the EM in general, and no studies have addressed the sign of DAC in Palestine. In this section, the original values of DAC are divided in two types. The first

category is the positive values of DAC, which represent income increasing. The second category is the negative values of DAC, which represent income-decreasing. So, the two dependent variables representing EM by income-increasing and the EM by income-decreasing.

The independent and control variables that have been addressed in the main model in this study will be addressed in this section to investigate their impacts on both new dependent variables. Hence, two panel data sets analyzed by Pooled OLS regression models to fulfil the objectives of this additional analysis. Table 5.17 shows the regression results of Panel (A) representing the positive DAC and Panel (B) representing the negative DAC.

Table 5.17 reveals that the findings of the regression analysis for positive and negative DAC, respectively. The findings show that both models were statistically significant, as the P-value is 0.000. In addition, the adjusted R-squared of the positive DAC model was 81%, which is quite high, while the adjusted R-squared of the negative DAC was 52%. This documents that both models are better for interpreting variance in DAC because the adjusted R-square of both models is higher than in the absolute value of the DAC model. This result is consistent with Alsultan (2017) that indicated splitting the values of DAC to positive and negative DAC was effective in expanding the variations in DAC due to the adjusted R-square.

Interestingly, this study found that 60% of the non-financial listed firms practiced EM by income-increasing activities, while 40% of the companies engaged in EM by income-decreasing activities. This finding is consistent with Dichev, Graham, Harvey, and Rajgopal (2013), who conducted their study in the United States. The authors documented that 60% of American firms, whether public or private, practiced EM by income increasing activities, while 40% of the firms engaged in income-decreasing

activities. Interestingly, Table 5.17 shows the older firms listed in the PEX were less likely to practice both EM by income-increasing and income-decreasing, respectively.

Consistent with the study that Beladi et al. (2020) conducted in the Chinese context, the operating cash flow, which was scaled by lag total assets, effectively constrained the level of positive DAC while it failed in deterring managers from engaging in EM by negative accruals. In other words, firms with high cash flows were less likely to report abnormal accruals. Concerning negative DAC, firms with high cash flow were likely to demonstrate conservatism by engaging in EM by income-decreasing activities. Hence, companies with high cashflows were more likely to use more conservative accounting policies to avoid reporting large earnings.

Regarding firm age, Table 15.17 shows a similar finding for the relationship of firm age and signed DAC. This result means that older firms were less likely to engage in EM by income-increasing activities and income-decreasing activities, respectively. A possible explanation that long-established firms were more stable under a situation of unrest in Palestine and more effective in mitigating the activities of practising EM.

In terms of firm growth, this study found a significant and positive relationship between EM by income-increasing activities and the rate of firm growth. So, substantial firm growth leads to a high magnitude of positive DAC or abnormal reported earnings. In contrast, firm growth has an insignificant association with EM by income-decreasing activities. This means that a company with a high growth rate was sufficiently effective in deterring managers from engaging in negative DAC. This result is consistent with Yen and Chung (2017), which was conducted in Australia. Yen and Chung (2017) found that growth companies were more likely to engage in EM by income-increasing activities to convey their favorable information to outside investors and to signal their prospects.

Surprisingly, the BOD independence factor (BODINDEP) had no statistical significance in the positive model at any level of significance (1%, 5%, or 10%). This result showed that non-executives at BOD are less effective at mitigating income-increasing EM activities in Palestine. This result aligns with Khalil and Ozkan (2016), which was conducted on non-financial listed Egyptian companies. Khalil and Ozkan (2016) documented that the proportion of non-executive directors was not related to positive accruals.

On the other hand, the BOD's independence factor (BODINDEP) had a statistical significance in the negative model at a level of significance of less than 1%. This means that the BOD non-executive directors were exceedingly effective in decreasing EM income-decreasing activities. Accordingly, this result reveals that BOD non-executive directors were effective in deterring managers from engaging in EM by utilizing overloading conservative policies. This result is inconsistent with Khalil and Ozkan (2016), who found no association between the presence of independent directors in the BOD and negative accruals.

Concerning panel (A), the findings reveal an insignificant association between BODINDEP and EM by income-increasing activities. That means the BOD non-executive directors were not effective in constraining abnormal accruals. This result was consistent with both Abed et al. (2012) and Bradbury, Mak, and Tan (2013). These studies found no effect of BDINDEP on abnormal accruals or positive DAC.

Similarly, most characteristics of BOD and AC had insignificant relationships with EM by income increasing activities except the BOD frequency of meetings, which had a negative and significant association with EM by income-increasing activities. So, these results show that AC and BOD characteristics were not effective in deterring managers in practising EM by income-increasing activities in the Palestinian context.

Regarding AC independence and the size of BOD, this study found an insignificant and negative association between them and abnormal accruals (positive DAC). The result of this study aligns with Bradbury et al. (2013), which found a negative relationship between AC independence and BOD size and positive accruals.

In terms of ownership structure factors, this study found a significant association between ownership structure variables (ownership concentration, institutional ownership, and foreign ownership) and aggressive EM. Table 5.17 illustrates a positive relationship between EM by income-increasing activities and the ownership concentration, as well as foreign ownership. On the other hand, there was an insignificant relationship between foreign ownership and ownership concentration with EM by income-decreasing activities. That means concentrated ownership and foreign investors encourage managers to report abnormal earnings to improve the performance and meet their interests and expectations. Shleifer and Vishny (1986) provided an explanation that might be appropriate evidence for the results of this current study. They said that high concentrated ownership might have an incentive and power to ensure that their self-interests are met.

In contrast, this study found that institutional investors constrain management in using their discretion in practising EM by income increasing. This result is consistent with Basiruddin (2011), who detected a negative association between the proportion of institutional ownership and income-increasing EM. Accordingly, Sheng (2003) documented that institutional investors could act as a complementary CG mechanism in reducing aggressive EM. On the other hand, Bradbury et al. (2013) and Latif and Abdullah (2015) found that institutional ownership was positively related to EM, so this result is unlike that in this current study, which has been elaborated in Table 5.17.

Panel (B) shows a significant and negative relationship between EM by income-decreasing activities and factors of CG (BODSIZE, BODINDEP, BODND, BODRE&GC, and ACINDEP), while BODSIZE and ACINDEP were not significant with the absolute value of DAC. This study found that ACSIZE increases EM by income-decreasing activities, which means that the members of AC are encouraging managers to choose more conservatism accounting policies not to report the real amount of annual earnings. So, the analysis of signed DAC provides deep insight into the relationship between CG and EM. Some CG factors were not effective in mitigating abnormal accruals, but others may work effectively to constrain negative accruals as EM by income-decreasing. This finding implies that PEX, policymakers, practitioners, and prospective researchers should pay attention to the sign of the DAC as a tool of EM practices. Furthermore, the regulations and the PCCG should not ignore the sign of the DAC because it reduces the quality of financial reports.

Table 5.18: Results of Panel Regression of Moderation Model and Singed DAC

Variables	Panel (C): + + DAC		Panel (D): - - DAC	
	Coef.	**P-value**	**Coef.**	**P-value**
AGROWTH	0.153	0.020**	0.080	0.061*
CASHFLOW	-0.767	0.000***	-0.532	0.000***
FIRMAGE	0.002	0.833	0.014	0.259
BODQUALI	0.036	0.083*	-0.017	0.226
ACQUALI	-0.023	0.096*	0.015	0.499
POLINS	-0.008	0.614	-0.022	0.009***
BODQUALI*POLINS	-0.004	0.747	0.060	0.572
ACQUALI*POLINS	0.005	0.901	-0.008	0.045**
_cons	0.053	0.123	-0.047	0.367
R-square	0.777		0.444	
Chi2	239.94		128.15	
Prob > F	<0.01		<0.01	
Observations	140		92	

Notes: + + DAC = The positive values of DAC computed by Kothari et al. (2005).
- - DAC = The negative values of DAC computed by Kothari et al. (2005).
AGROWTH = Annually firm growth. CASHFLOW = Cash flow from operating activities scaled by lagged total assets, FIRMAGE = the numbers of the year of the company since establishment; BODQUALI = the effectiveness of BOD as a composite measure; ACQUALI = the effectiveness of AC as a composite measure; POLINS = dummy the time of severe political crisis coded as "1" for the years from 2011 to 2014 and "0" if otherwise.

Indeed, prior studies have found that the behavior of companies might be directed to engage in EM by income-decreasing accruals to an economic crisis to save earnings from being reported for future periods. (Habib et al., 2013; Jiang, Habib, & Wang, 2018). However, some other prior studies have argued that management might engage in income-increasing DAC activities during crises to meet expected earning, enhance performance, and avoid pressure from stakeholders (Ahmad-Zaluki et al., 2011; Jiang et al., 2018). Accordingly, this current study elaborates upon the role of the political situation in Palestine in influencing the sign of DAC in Table 5.18. Furthermore, the current study also investigates the effectiveness of the BOD and the AC on EM through income-increase and income-decreasing policies. Also, the results verify that the political instability still plays a moderating role between BOD quality and AC quality and sign of the DAC.

In terms of positive DAC, the findings of this additional analysis show that BODQUALI was positively associated with positive DAC, and ACQUALI was negatively associated with positive DAC. This means that BOD quality was not effective in deterring managers from engaging in EM by income-increasing activities. A possible explanation that BOD may represent block holders who want to fulfil their interests by inflating the reported income. This result is supported by the result of ownership concentration in Table 5.17, which found a positive association between concentrated ownerships and EM by income-increasing activities.

On the contrary, the negative relationship between AC quality and EM by income increasing reveals that AC is effective in monitoring managers and controlling them in engaging in more EM by income-increasing activities. In terms of negative DAC, BODQUALI and ACQUALI had an insignificant relationship with EM by income-decreasing activities. That means that no substantial evidence exists that AC and BOD

effectiveness play a vital role in mitigating EM by income-decreasing activities in the Palestinian context.

The results of political instability in Table 5.18 indicate an insignificant relationship between political instability and positive DAC, while the finding of panel (D) reveals a positive and significant relationship between political instability and negative DAC. Hence, there is strong evidence that the political unrest situation is related to a high level of income-decreasing accruals, making Palestinian companies more conservative in reporting their earnings to avoid bad performance in the years after a severe crisis. This result is consistent with prior studies such as Byard et al. (2007) and Han and Wang (1998). Byard et al. (2007) examined EM by US oil firms in the period after the Katrina and Rita hurricanes. They found that US oil and natural gas companies practiced EM by income-decreasing accruals immediately after the Katrina and Rita hurricanes. They also added that prior studies showed that some firms react to periods of high unrest political situation by reporting income-decreasing accruals. Additionally, the result of political instability and the sign of DAC was also in the line with Han and Wang, (1998). They conducted their study to investigate the impact of Gulf crisis, which occurred after Iraq's invasion of Kuwait in 1990. Their sample was the petroleum refining firms. They found that these firms used income-decreasing accruals during the crisis to reduce unusually large earnings increases and minimize their political sensitivity and related costs.

This additional analysis illustrated in Table 5.18 investigated whether political instability played a moderating role between the relationship of BODQULAI and ACQUALI and signed DAC. Surprisingly, political instability did work as a moderator in both cases of positive and negative DAC. Under the findings in panel (C), political instability moderates the association between BODQUALI and ACQUALI with EM by

income increasing. So, BODQULAI is related negatively with positive accruals under political instability. On the other hand, ACQULAI was related positively to negative accruals. Moreover, the same results were revealed in the findings of panel (D). In summary, these results are consistent with the findings presented in Table 5.15. To conclude, BOD is working effectively under political unrest situations to mitigate EM by signed accruals, while AC does not do so.

5.6.3 The Impact of Political Instability on CG–EM Relationship

This present study acknowledges that the effectiveness of CG in mitigating EM practices might rely on the period of study, particularly in relation to the severe political instability of 2011–2014. This section splits the period of this study into two periods, which represent a period of severe crisis from 2011 until 2014 and another period, which represents a post severe political instability period from 2015 till 2018. The splitting of the study periods was addressed in prior studies, such as (Khalil & Ozkan, 2016). Indeed, Khalil and Ozkan (2016) conducted their study to investigate the association between CG characteristics and EM practices in listed Egyptian firms. Also, they split the period of their study into three periods pre-, during-, and post-global financial crisis. So, this current study split the periods according to prior literature.

The incentive to do this analysis was that some companies ceased trading in PEX directly after the period of severe political instability. So, in the first period, which was during severe political instability from 2011 to 2014, the number of companies listed was 33. Two companies stopped trading because of manipulation actions such as those of Global Com. which registered in its financial reports non-existent assets of about USD 5 million (PEP, 2016). Likewise, PEX also stopped trading the shares of the Arab

Real Estate company due to the company's non-compliance with market rules and instructions and the lack of disclosure (WAFA, 2016).

On the other hand, in the second period, which was the post-severe political instability from 2015 to 2018, a new company was listed (Sanad company). This means the total non-financial companies listed in the post-crisis period was 34 companies. Thus, this was sufficient motivation to examine the situation of CG mechanisms and their relationship with EM practices during and post-severe political instability.

This study expected that CG mechanisms would play an ineffective role in restricting EM during the political instability period. On the other hand, the companies under crisis are unlikely to engage in EM (Khalil & Ozkan, 2016). Furthermore, the finding in Table 5.15 revealed that the quality of BOD was more effective in constraining EM under severe political instability, while AC Quality did not do so. These results were detected when the aggregate measure was constructed for AC and BOD quality. These inconclusive results are a strong motivation to examine the influence of CG mechanisms individually on EM practices under both situations, which are severe crises and post sever crises. This additional analysis will give a deeper understanding of the role of CG in the Palestinian setting.

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Table 5.19: Regression Results of CG and EM During and Post Crisis

Variable	Panel (E): During Crises		Panel (F): Post-Crises	
	Coef.	**P-value**	**Coef.**	**P-value**
AGROWTH	0.074	0.316	0.190	0.004***
CASHFLOW	0.047	0.628	-0.530	0.000***
FIRMAGE	-0.028	0.010***	-0.054	0.000***
BODSIZE	0.002	0.409	-0.002	0.380
BODMEET	0.004	0.201	-0.006	0.037**
BODINDEP	-0.052	0.090*	-0.043	0.064*
BODNDD	-0.053	0.031**	-0.072	0.011**
BODRE&GC	-0.040	0.000***	-0.014	0.194
CEODUAL	-0.013	0.274	-0.023	0.148
ACSIZE	-0.030	0.009***	0.002	0.773
ACINDEP	0.081	0.010***	-0.011	0.553
ACFEXPD	0.048	0.006***	-0.016	0.431
OWNERCON	0.024	0.554	-0.001	0.984
INSTIOWNRER	-0.085	0.011**	-0.070	0. 100*
FOREOWNRER	0.051	0.000***	0.053	0.004***
_cons	0.183	0.016	0.391	0.000
R-Square	0.320		0.723	
Adjusted R-Square	0.218		0.680	
F-stat	18.27		17.30	
Prob > F	<0.01		<0.01	
Observations	116		116	

Notes: ABSDAC = The absolute values of DAC computed by Kothari et al. (2005). AGROWTH = Annually firm growth. CASHFLOW = Cash flow from operating activities scald by lag total assets, FIRMAGE = the number of the year of the company since establishment, BODSIZE = the total number of BOD members, BODMEETD the annual number of BOD meeting times; BODINDEP = the proportion of non-executive directors in the BOD; BODND = the proportion of foreign directors in the BOD; BODRE&GC = the presence of the committee of remunerations and governance in the company; CEODUAL= the duality role of CEO and chairman; ACSIZE = the total number of AC members; ACINDEP = the proportion of non-executive members in the AC; ACFEXP = the proportion of financial experts members in the AC; OWNERCONC = the percentage of share to total shares held by the block holders who have more than 5% of the total share of the firm. INSTIOWNER = the percentage of shares to total shares owned by institutional investors and FOREOWNER = the percentage of shares to total shares owned by foreign investors.
Panel (E) = The regression results during the sever crisis from 2011 to 2014.
Panel (F) = The regression results post the sever crisis from 2015 to 218.

Panel (E) in Table 5.19 shows that a negative and statistically significant association existed between FIRMAE, BODRE&GC, BODINDEP, BODND, ACSIZE, and INSTIOWNER, and EM activities during-crises. ACINDEP, ACFEXP, and FOREONER had a positive and statistically significant association with EM practices. Also, the other CG characteristics have an insignificant relationship with EM practices

for non-financial firms listed on the PEX. Interestingly and consistent with Khalil and Ozkan (2016), this study found that non-executive members in AC exacerbated EM activities during the period of severe political instability. Therefore, a possible explanation is that large stockholders were likely to prefer weak ACs whose members lack sufficient backgrounds, leading to higher EM (Khalil & Ozkan, 2016). The results of panel (E) provide evidence that the negative relation between both BODINDEP and BODND and EM should motivate BODs to appoint more independent directors and the diversification to boost financial report quality by mitigating the EM activities in Palestine.

Because some CG mechanisms are not sufficiently effective in mitigating EM, regulators and PEX should consider that the CG system needs to be improved and developed in Palestine to enhance the control on management to practice lessen EM during politically unstable situations. Some findings during the crisis reveal that management may prefer ineffective BODs rather than effective ones to maximize a company's profitability and inflate future earnings until the economy recovers.

The regression results in panel (F) in Table 5.19 align with the results of the main model in Table 5.14. Thereby, the additional analysis in Table 5.19 shows a statistically significant and negative association between FIRMAGE, CASHFLOW, BODINDEP, BODMEET, BODND, and INSTIOWNER with EM activities. These results indicate that older firms, high cash flow, more non-executive directors on the BOD, high meeting frequency, and a high percentage of institutional ownership are effective monitoring mechanisms in a post-crisis period, which, in turn, reduces the level of EM activities in Palestine. This means that these mechanisms constitute good motivation for the management to not engage in more EM to maintain a firm's reputation and avoid potential penalties that PEX, regulators, and auditors can impose on the company.

Furthermore, this study provides supporting evidence that the characteristics of the AC improve over time, as the signs of the coefficients of ACINDEP and ACFEXP were negative, which means that a negative association with EM practices was present in the period from 2015 to 2018. This implies that adding more non-executive members and more financially experts to an AC may be better for improving its mentoring function, which, in turn, improves the quality of financial reports by mitigating EM activities.

5.7 Summary

This chapter reports an empirical study on the associations between CG mechanisms and EM practices in Palestinian non-financial companies listed on PEX during the period of eight years firm from 2011 to 2018. Accordingly, this study conducted two empirical models to achieve the objectives of the study and to answer the research questions. The main model addresses CG mechanisms (e.g., the characteristics of the BOD, AC characteristics, and OS) to investigate their influence on EM. Furthermore, the current chapter documented evidence regarding the moderating role of political instability on the association between BOD quality and AC quality with EM. The results generated from preceding investigations revealed several important points presented as follows.

First, in terms of the main model in Table 5.14, the empirical results tell a significant of a connection between Cashflow, Growth, Firm age, BOD independence, BOD nationality diversity, BOD meetings, the existence of governance committee (BODRE&GC), institutional ownership, foreign ownership and show an insignificant connection between BOD size, CEO-duality, AC size and AC independence, AC Financial expertise and ownership concentration, with EM. One possible explanation

for the insignificant results is that CG systems in the Arab countries need to focus attention on the unique characteristics of the Arab countries and their environment, particularly Palestine, which has been branded by a high degree of political instability for a long time.

Second, in respect of the moderation model, the result shows an important connection among BOD Quality, AC quality, and political uncertainty with EM. The result shows that BOD Quality and AC quality were reasonable effectively in capturing the associations of characteristics of the BOD and AC with EM**.**

Third, the empirical results provide support for the moderating effects of political unsteadiness on the association between BOD and AC quality with EM. The result indicates that political instability is consolidating the effectiveness of the BOD of directors in constraining EM, weakens the effectiveness of AC in mitigating EM**.** The next chapter summarizes the study's primary results, the implications, and contributions, and presents suggestions for further studies.

Table 5.20: Summary Results of the Main and Moderation Model

Hypothesis	Variables	Expected Sign	Actual Sign	Results
H01	BODSIZE	-	-	**Supported**
H02	BODMEET	-	-	**Supported**
H03	BODINDEP	-	-	**Supported**
H04	BODND	-	-	**Supported**
H05	BODRE&GC	-	-	**Supported**
H06	CEO_DUAL	+	-	Not Supported
H07	ACSIZE	-	-	Not Supported
H08	ACINDEP	-	-	Not Supported
H09	ACFEXP	-	+	Not Supported
H10	OWNERCON	+	+	**Supported**
H11	INSTIOWNRER	-	-	**Supported**
H12	FOREOWNRER	+	+	**Supported**
H13	BODQUALI	-	+	Not Supported
H14	ACQUALI	-	-	**Supported**
H15	POLINS	+	+	**Supported**
H16	BODQUALI*POLINS	+/-	+/-	**Supported**
H17	ACQUALI*POLINS	+/-	+/-	**Supported**