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The Relationship Between Disclosure Quality and Firm Performance: Evidence from Companies Listed in Palestine Exchange

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Abstract. Disclosure quality enhances market efficiency and attracting investments for the firms which has positive consequences for the firm's performance. This study investigates the relationship between disclosure quality and performance of the companies listed on the Palestine Exchange (PEX). The study includes 49 firms covering the period from 2005 to 2016. while several indicators are used to measure firms' performance, disclosure quality is assessed by discretionary accruals. Using GMM analysis, a significant relationship is found between disclosure quality and performance of the companies listed in the PEX.

Keywords: Disclosure quality · Firm performance · Palestine Exchange · GMM

1 Introduction

The goal of disclosures is to provide timely and accurate information to a variety of users. Executives should be cautious about the accuracy and sufficiency of the information included in the financial statements as these statements represent the primary instrument for communication with users. It is established that a relationship exists between the disclosure quality and the performance of firms and accordingly the investors decisions [1]. Palestine is an underdeveloped country with political instability [2, 3]. Economic growth and attracting investment are always considered as priorities. Accordingly, disclosure quality has significantly considered by the Palestinian regulators, The Palestine Capital Market Authority (PCMA) has worked to ensure that users of financial information have adequate access to high-quality information. This study addresses the impact of disclosure quality on a company's performance. A panel data of 49 companies listed on the PEX was collected from 2005 to 2016. Following previous studies, discretionary accruals is used to assess disclosure quality. On the other hand, six variables are used to

assess company performance: return on assets, return on equity, revenues, net income, liquidity, and Tobin's Q. Results reported a significant relationship between disclosure quality and company performance.

2 Literature Review

Several studies asserted the necessity of having high-quality disclosure arguing that the high-quality disclosure improves the firms' performance. It fosters true transparency and it is a key method used to manage corporations in the context of capital market [4] is. High-quality disclosure enhances the ability of shareholders in making well-informed decisions. It is one of the most beneficial instruments in protecting investors, attracting capital, and maintaining confidence in the capital markets. The lack of transparency leads to the loss of market integrity, which carries enormous costs not just for the company and its shareholders, but also for the economy as a whole. As a result, shareholders and potential investors require precise, complete, and comparable information in order to make informed selections. A lack of knowledge or clarity impairs the ability of markets to function and raises the cost of capital [5]. Disclosure quality can be measured by the qualitative characteristics of accounting information. However, lack of direct measures for these characteristics, push the researcher to rely on the earning management practices to measure disclosure quality [6]. Disclosure quality is obtained from the quality of profits declared. Accordingly, the higher the level of discretionary accruals, the wider the gap between economic performance and financial reporting results [7]. The firm benefits from the high degree of disclosure quality since it lowers the cost of capital. Soheilyfar [8] found a strong association between corporate governance and disclosure quality. Similarly, [9] showed that disclosure quality is influenced by corporate governance. The accounting literature has considered the relationship between accounting information, cost of capital, and firm performance as a critical issue. Botosan [10] indicated that information lowers the cost of capital by lowering investors' assessment risk. Heflin, Shaw, and Wild [11] showed that assessing the association between information and bid-ask spreads is difficult. They claimed that realized spreads capture transaction costs better than quoted spreads since many transactions are conducted within the quoted spread. When utilizing quoted bid-ask spreads, it is likely to attribute results to information effects incorrectly since the quoted bid-ask spread also reflects order processing and inventory holding expenses. Thus, these constraints exist, and a more sophisticated information asymmetry measure is required to account for them, and a negative relationship between bid-ask spreads and the level of knowledge was discovered. Disclosure quality and policies that reduce information asymmetry boost the liquidity of a company's securities, raise the current stock price, and lower the cost of capital [10]. In firms with strong management and weak investors, managers might take advantage of their shareholders by withholding important information, resulting in the inescapable occurrence of agency costs. Aksu and Kosedage [14] confirmed the effect of disclosure quality on company performance. Similarly, Mohammadi [15] found a positive effect of disclosure quality on firm performance. Likewise, Patel, Balic, and Bwakira [16] reported that disclosure quality has a beneficial influence on firm performance. Higher disclosure quality reduces the market beta of the firm, and thus reduce abnormal

returns and enhance confidence in the financial markets [17]. Disclosure quality ensures investor protection, greater access to the capital market, and raises firm profitability [16]. It improves the market efficiency and the efficient of investors' decisions [19, 20]. Consistently, Chi [21] findings showed a favorable association between disclosure quality and firm performance. For the financial companies in Palestine a study conducted by Asmar [22] investigated the bank-specific factors that influence the net interest margin of banks. Several characteristics, such as credit risk, risk aversion, bank orientation, and foreign banks, have statistically significant effects on the net interest margin, according to the findings.

3 Research Methodology

A panel of data was compiled from the annual reports of Palestinian companies listed on the PEX from 2005 to 2016. Palestine Exchange has 49 companies in 2016. We consider the available data because many companies were listed after 2005, and hence the data is imbalanced. Disclosure quality represents the dependent variable (DQ). Following previous studies, this study used the degree to which firms practice earning management to assess the quality of financial reporting [6]. Better disclosure is linked to lower use of earning management. Earning management is measured by discretionary accruals [7, 24] since disclosure quality is generated from the quality of earnings revealed in financial statements. In other words, the quality of financial reporting is derived from the quality of profits declared in these statements. The dependent variable of this study is firm performance. Many indicators are used to measure this variable including return on assets (ROA) which is calculated by dividing the firm's net revenue by its total assets [25], return on equity (ROE) measured by dividing a firm's net income by its total equity [26], revenues (RV) which are defined as the firm's total revenues [27, 28], net income (NI) as a measure of the firm's net income [29, 30], liquidity (LQ) calculated by dividing current assets by current liabilities [31, 32], and Tobin's Q (TQ) is calculated by multiplying the market share price by the number of outstanding shares [33]. Six models were developed to explore the influence of disclosure quality on firm:

$$Y = \alpha + \beta DQ_{ti} + \beta t \quad (1)$$

where Y is ROA_{ti}, ROE_{ti}, RV_{ti}, NI_{ti}, LQ_{ti}, or TQ_{ti}. ROA stands for return on assets for companies registered on the Palestine Exchange, while ROE stands for returns on equity, RV stands for revenues, NI stands for net income, and LQ and TQ stand for firm liquidity and market firm price, respectively. The disclosure quality of companies listed on PEX is referred to as DQ.

4 Results and Discussion

The first portion of this section quantitatively describes the study's variables. To assess the normal distribution of each variable, the mean, biggest value, lowest value, standard deviation, and Jarque–Bera were determined. As seen from Table 1, the independent

Table 1. The independent variable (DQ)

Measure	DQ	ROA	ROE	RV	NI	TQ	LQ
Mean	-2250191	0.03	0.07	38214103	7448877	940151	2.25
Median	-768480	0.02	0.06	12563185	1480217	322657	1.37
Maximum	24772778	0.28	0.89	600000000	120000000	1470000	33.75
Minimum	-43581999	-0.2	-0.82	28752	-16525607	1450000	0.05
Std. dev	8574305	0.06	0.14	82313455	18589165	1920000	2.77
Observations	295	295	295	295	295	295	295

variable (DQ) has a mean of (2,250,191), a maximum of (24,772,778), a minimum of (-43,581,999), and a standard deviation of (8,574,305).

The stationary of the research variables (dependents and independents) was evaluated using the Augmented Dickey-Fuller (ADF) test to guarantee that there was no Unit Root problem. The ADF test revealed that all variables are not stationary, leading to acceptance of the unit root null hypothesis. Variables were then evaluated at the first difference. The data was found to be stable for all of the study's variables. Table 2 shows the findings of ADF P-Values at the level, first difference, and second difference for all variables.

Table 2. Results of augmented Dickey-Fuller test for unit root

Variable	Level		First difference	
	ADF statistics	P-value	ADF statistics	P-value
DQ	81.07	0.38	185	0.000
ROA	109.14	0.01	213	0.000
ROE	111.3	0.01	204	0.000
RV	76.51	0.53	142	0.000
NI	80.38	0.4	206	0.000
LQ	162.68	0	218	0.000
TQ	110.27	0.01	147	0.000

The study tested the hypothesis that statistics and econometrics use single-equation or multi-equation regression models of time series for modeling economic variables and their interrelationships, based on Box and Pierce methodology [24]. Their basic assumption is that time series or, in the case of multi-equation models, linear combinations are stationary. However, because most economic time series are non-stationary, this criterion is rarely met in practice. Because the economic variables were non-stationary in the analysis, the classical assumptions of normal regression methods were abused, resulting in erroneous estimations. Only when variables are stationary do traditional regression properties hold true. Most economic variables, on the other hand, are not stationary and

so do not satisfy these criteria. For this reason, and due to the small size of the population and the test of stationary of the variables in the study, the generalized method of moment (GMM) will be used to test the study hypotheses through first difference with one lagged dependent variable, allowing for the modeling of a partial adjustment mechanism, making it more appropriate for analysis than classical regression models. The following are the hypotheses testing results:

H1: there is a relationship between disclosure quality and return on assets (ROA). The findings of examining the link between disclosure quality and firm performance (ROA) utilizing (GMM) are shown in Table 3. The test was conducted with the dependent variable ROA as an instrumental variable at first difference. The coefficient of disclosure quality is $(-5.81E-10)$ with t. statistic (-199.59) and P-value (0.000) according to J-statistic (191.93) and p-value (0.000) , (0.0000) . The findings revealed a negative significant link between the two variables, implying that disclosure quality has a negative impact on return on assets (ROA). This result contradicts Mohamadi [15]. As a result of the findings, we decided to reject the null hypothesis and embrace the alternative.

Table 3. Results of (GMM): the relationship between disclosure quality and ROA

	Coefficient		Std. error	t-statistic		Prob.
Variables						
ROA(-1)	0.013214		0.000	354.5699**		0.000
DQ	$-5.81E-10$		0.000	-199.59^{**}		0.000
Effects specification			Cross-section fixed (first differences)			
Mean dependent var	-0.00035		S.D. dependent var	0.066098		
S.E. of regression	0.070783		Sum squared resid	1.88384		
J-statistic		191.9349	Instrument rank	49		
Prob (J-statistic)		0.000				

** Significant at 1%

H2: there is a relationship between disclosure quality and return on equity (ROE).

Table 4 shows the findings of (GMM test)'s of the link between disclosure quality and firm performance (ROE), which was done with the dependent variable ROE as an instrumental variable at first difference. The model is fit based on J-statistic (46.48) and p-value (0.4523) , both of which are greater than 5%. With a t statistic of (-23626) and a P-value of $(-1.77E-09)$, the disclosure quality coefficient is $(-1.77E-09)$ (0.0000) . The findings revealed a negative significant link between the two variables, implying that disclosure quality has a negative impact on return on equity (ROE). This conclusion contradicts [20]. We reject the null hypothesis and accept the alternative hypothesis as a result of the findings.

Table 4. Results of (GMM) the relationship between disclosure quality and ROE

Variables	Coefficient		Std. error	t-statistic		Prob.
ROE(-1)	-0.29287		1.2E-05	-23626.4**		0.000
DQ	-1.77E-09		1.1E-11	-159.549**		0.000
Effects specification			Cross-section fixed (first differences)			
Mean dependent var	-0.00281	S.D. dependent var		0.180639		
S.E. of regression	0.153796	Sum squared resid		8.893562		
J-statistic		46.4835	Instrument rank	48		
Prob (J-statistic)	0.452341					

** Significant at 1%

H3: there is a relationship between disclosure quality and Tobin’s Q.

The findings of examining the link between disclosure quality and firm performance (TQ) using (GMM) are shown in Table 5. The test was conducted with the dependent variable TQ as an instrumental variable. The model is fit based on J-statistic (43.95) and p-value (0.4738), both of which are greater than 5%. The quality of disclosure coefficient is (1.4430), with a t statistic of (15944) and a P-value of (0.0000). The findings revealed a substantial positive association between the two variables, which is consistent with Gelb & Zarowin [35] and Mohamadi [15]. We reject the null hypothesis and accept the alternative hypothesis as a result of the findings.

Table 5. (GMM) results the relationship between disclosure quality and Tobin’s Q

Variables	Coefficient		Std. error	t-Statistic		Prob.
TQ(-1)	0.189977		0.000	12827.68**		0.000
DQ	1.442967		0.000	15944.6**		0.000
Effects specification			Cross-section fixed (first differences)			
Mean dependent var	125813.8	S.D. dependent var		22257490		
S.E. of regression	41986485	Sum squared resid		6.63E+17		
J-statistic		43.94728	Instrument rank	46		
Prob (J-statistic)	0.473877					

** Significant at 1%

H4: there is a relationship between disclosure quality and firms Revenues.

Table 6 presents the results of a test conducted by (GMM) to see if there is a link between disclosure quality and firm performance revenues (RV). The test was conducted

with the dependent variable RV as an instrumental variable. The model is fit based on J-statistic (45.15) and p-value (0.4237), both of which are greater than 5%. The quality of disclosure coefficient is (−0.7699), with a t statistic of (−16260) and a P-value of (0.0000). The results revealed a substantial negative association between the two variables, which contradicts Lang and Lundholm [19] and chi [20]. We reject the null hypothesis and accept the alternative hypothesis as a result of the findings.

Table 6. (GMM) results the between disclosure quality and firms revenues (RV)

Variables	Coefficient		Std. error	t-Statistic		Prob.
RV(-1)	0.557241		8.8E-06	63183.6**		0.000
DQ	−0.76999		4.7E−05	−16260**		0.000
Effects specification		Cross-section fixed (first differences)				
Mean dependent var	1942847	S.D. dependent var	13393705			
S.E. of regression	16332599	Sum squared resid	1E+17			
J-statistic	45.149	Instrument rank	46			
Prob (J-statistic)	0.423705					

** Significant at 1%

H5: there is a relationship between disclosure quality and firms net income.

The results of a test of the link between disclosure quality and firm performance net income (NI) using (GMM) are shown in Table 7. The test was done at first difference, with the dependent variable NI as an instrumental variable. The model is fit based on J-statistic (46.51) and p-value (0.4101), both of which are greater than 5%. The quality of disclosure coefficient is (0.2998), with a t statistic of (27465) and a P-value of (0.0000). As claimed by [35] and [19], the results revealed a positive significant association between the two variables. We reject the null hypothesis and accept the alternative hypothesis as a result of the findings.

Table 7. (GMM) results between disclosure quality and firms net income (NI)

Variables	Coefficient		Std. error	t-Statistic		Prob.
NI(−1)	0.076972		6.6E−07	116642.1**		0.000
DQ	0.299841		1.1E−05	27465.92**		0.000
Effects specification		Cross-section fixed (first differences)				

(continued)

Table 7. (continued)

Variables	Coefficient		Std. error	t-Statistic		Prob.
Mean dependent var	195383.2		S.D. dependent var	3172156		
S.E. of regression	3636594		Sum squared resid	4.97E+15		
J-statistic	46.50597		Instrument rank	47		
Prob (J-statistic)	0.41015					

** Significant at 1%

H6: there is a relationship between disclosure quality and firms' liquidity ratio.

Table 8 illustrates the results of a (GMM) test of the association between disclosure quality and firm performance liquidity ratio (LQ), with the dependent variable LQ entered as an instrumental variable. The model is fit based on J-statistic (46.14) and p-value (0.4663), both of which are greater than 5%. The quality of disclosure coefficient is (2.63E-07), with a t statistic of 207.71 and a P-value of 0. (0.0000). The findings revealed a substantial positive link between the two variables, implying that disclosure quality has a positive impact on the firm's liquidity ratio (LQ), and that as disclosure quality improves, so does the liquidity ratio. The findings lead us to reject the null hypothesis and accept the alternative hypothesis H6: there is a link between company liquidity and disclosure quality.

Table 8. (GMM) results between disclosure quality and firms liquidity ratio (LQ)

Variables	Coefficient		Std. error	t-Statistic		Prob.
LQ(-1)	0.237525		0.00012	2028.005**		0.000
DQ	2.63E-07		1.3E-09	207.7112**		0.000
Effects specification			Cross-section fixed (first differences)			
Mean dependent var	-0.00117		S.D. dependent var	3.207726		
S.E. of regression	4.121154		Sum squared resid	6385.951		
J-statistic	46.14281		Instrument rank	48		
Prob (J-statistic)	0.466356					

** Significant at 1%

5 Conclusion

Quality disclosure improves market efficiency and provides users of financial statements with reliable information for making informed decisions. This study looked at the impact of disclosure quality on company performance for companies listed on the Palestine Exchange (PEX) from 2005 to 2016. To investigate the association between these

variables, the researchers used the GMM approach. Disclosure quality has a favorable impact on Tobin's Q, net income, and liquidity while having a negative impact on return on assets, returns on equity, and revenues, according to the study. The study's contradictory findings show that more conceptual thinking on disclosure quality and company performance in emerging countries is required. For future research, we recommend to assess the influence of the environmental factors especially culture on the relationship between disclosure quality and performance. Several studies reported the importance of such factors on the characteristics of the financial reporting frameworks [36, 37].

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