# THE IMPACT OF BOARD OF DIRECTORS CHARACTERISTICS ON REDUCING EARNINGS MANAGEMENT

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#### **ABSTRACT**

This study aims to reveal the impact of Board of Directors characteristics on reducing the Earnings Management (EM) practices at (94) non-financial companies listed on ASE, where data collected through the financial reports for the period (2015-2020). Researchers measured the independent variable through specific measurements represented in the Board Size (BdSiz), Board Independence (BdInd), Board Meeting (BdMeet), Business Results (LOSS), and Firm Size (FirmSiz) and used the Jones model to measure EM. The study found that BdInd, BdMeet, and FirmSiz has an impact on the reduction of EM practices while the BdSiz and the disclosure of business LOSS don't affect the reduction of EM practices, where researchers used EVIEWS statistical program to retrieve results.

**Keywords**: Board of Directors Characteristics, Board Independence, Board Meeting, Board Size, Earnings Management

#### INTRODUCTION

Many corporate management perform EM practices, which improve the net profit image and the financial position of firm, and reasons for that is not a secret to the reader; where the end justifies the means in order to earn more rewards, bonuses, and benefits for the Board of Directors members, and the reason may be for credit, investment, or tax purposes. The concept of EM practices began to emerge in the 1980s, when a recession forced managements to practice EM. EM practices may be legitimate or may be illegal, but the goal from it remain to mislead the financial statements users or achieve specific management objectives (Li et al., 2020), therefore it's possible to reduce managers' control of information and the discrepancy of information through the optional disclosure (Scott, 2012).

In addition, the crisis of confidence and trust among users of financial information and published financial statements has worsened in Jordan since 1990; at the collapsed of Petra bank. The global financial crisis in 2008 also caused the collapse of many companies around the world, which led to increase the possibility of using the EM practices, and during current days and as a result of the economic performance decline in the world, due to Covid19 the EM practices may appear generally worldwide; in one way or another. In Jordan as an example of emerging economies countries, study tries to show the extent of corporate management to practice EM where scientists have established many scales to discover it.

At the same time, this research considers it necessary to limit or reduce EM practices, where adequate disclosure enhances the capabilities of financial statements users in decision-making processes. The optional disclosure is more important to stakeholders and preferred by companies in compliance with the instructions of organizations that regulate the profession of accounting and finance in the state, and also in compliance with the rules of corporate

governance or the Board of Directors 'instructions (Sartawi et al., 2014). The basic hypothesis for the relationship between Board of Directors characteristics and EM is are verse relationship because the Board of Directors characteristics help to reduce the inconsistency of information between managers and the financial information users, where it considers a basis for EM. This study aims to reveal the impact of Board of Directors characteristics on EM at the financial market in Jordan.

#### STUDY PROBLEMS

The verification of relationship between Board of Directors characteristics and its impact on EM considers one of the common research topics in accounting and financebut the size of evidence in developing economies, especially in Jordan and North African countries is small, and as an example the study of (Sartawi et al., 2014) which showed a reverse relationship between the optional disclosure and EM. The time period for conducting this type of studies may be an important factor to reveal the nature of relationship between them, and also the diverse working conditions, disclosures, and disclosure size may change the form of relationship (Saona et al., 2020). Therefore, the continuousness of research in this topic enhances the scientific literature and develops the level of scientific contribution in this field, especially in light of the Corona pandemic where the economic performance has changed all over the world. The study of this topic renews and develops the awareness and perception of related parties about the study variables (Francis et al., 2008).

As mentioned earlier, the essence of EM lies in the inconsistency of information between corporate managers and the financial reports 'users, where the work in light of the Corona pandemic may give more important explanations for the Board of Directors characteristics to reduce EM. The compliance with corporate governance; in regard to the disclosure of Board of Directors characteristics reduce and unite the comparisons between companies and help to unify knowledge about the impact of reducing EM practices.

## **Creativity & Scientific Addition**

The need for information users to financial reports that are free of misinformation and manipulation consider very important thing to them, and any attempt to change the reality of LOSS to a greater result consider a form of fraud and misinformation, and may affect competitive position and market value of the company, therefore working on solutions has become absolutely necessary. The lack of research in Jordan and north African countries about this topic has motivated the search for it, and the commitment to clean work ethics and the avoidance and elimination of manipulation, fraud, and forgery cases, as well as the rejection of EM practices used by corporate managements, which will be in the interest of financial information users and eliminates information monopoly cases. The reduction of management practices in respect to EM through the Board of Directors characteristics leads to enhancements in scientific contribution and developments of some science literature in this study.

#### **STUDY OBJECTIVES**

The study aims to reveal the existence level of EM phenomenon in the Jordanian non-financial companies through the revised Jones model and also aims to clarify the impact level of Board of Directors characteristics on the reduction of EM phenomenon, reveal the EM level, make an attempt to provide services to corporate managements, and convince them that scientific studies reveal their practices in EM.

#### STUDY IMPORTANCE

The study importance stems from showing the importance of Board of Directors characteristics performed by the Jordanian non-financial companies represented in (BdSiz, BdInd, BdMeet, FirmSiz & LOSS) on reducing the practices of EM, which contradict with the accounting principles and policies, especially the basis of entitlement that considers a passage for the implementation of these practices. The absence of financial reports from this phenomenon enhances the reliability in financial statements, which considers more positive than adopting questionable practices to improve the outcome of businesses or financial positions. Researches about the topic of reducing information inconsistency between management and users of financial statements consider a requirement for many relevant parties, especially the general authority of shareholders, future investors, and others. In addition, the scientific contribution lies in filling or reducing the research gap by showing and analyzing the impact and role of Board of Directors characteristics on reducing the EM.

## PREVIOUS STUDIES & DEVELOMENT OF STUDY HYPOTHESES

## **Earnings Management**

EM means the preparation and implementation of creative accounting procedures to improve net income or maximize assets by postponing the recognition of expenses or accelerating the recognition of revenues as well as changes in the benefits of contracts with the external parties; in the short term (Eriki, 2014) in order to mislead users of financial statements either with the intention of implementing a particular policy, achieving benefits of rewards and incentives, renewing the appointment of Board of Directors, or for certain investment purposes. EM represented in the creative accounting and the management of monetary and accruals, where all forms of EM include practices that use the accounting methods and policies to modify certain balances, bypass or avoid the General Acceptable Accounting Principles (GAAP), postpone contracts, accruals, and cash in and out, or through accounting estimates.

These management practices came as a result of inconsistent information between the management and the relevant parties, which gave managements the possibility of conducting EM practices to achieve different benefits. In order to protect the agency theory which states that management is an agent for shareholders in the company management by protecting its assets and by providing the best financial performance, the need for studies about reducing management practices has become necessary. Sanjaya (2011) believes that managers in companies with a larger agency problem show more EM, and that agency problem usually results from a lack of consideration to the interests of shareholders and related parties, therefore companies that practice EM usually have agency problems. The gap in literature exists in relation to EM practices and its reduction, where there are many studies that have shown reverse relationships between the Board of Directors characteristics and EM practices while others have shown a positive relationship. Therefore, the gap still exists and also the controversy still exists in this regard, and the need to fill the gap through renewed studies in different circumstances and periods may reduce the gap in literature.

#### Previous Studies Related to Board of Directors Characteristics & EM

There are many studies that have dealt with the impact of Board of Directors characteristics on reducing EM, some of those confirmed the role of Board of Directors characteristics on reducing EM (Uwuigbe, 2017), while other studies have shown that many aspects of Board of Directors characteristics do not affect the reduction of EM practices (Al-Sartawi, 2014). Studies of (Baatour, 2017; Sanjaya, 2012) showed that BdSiz does not affect EM, where lessons lies in the tasks and powers of board members, while the study of (Al-

Sartawi, 2014) showed that BdInd variable affects the reduction of board members' practices in EM.

(Karajeh, 2019) study found that companies with high net profits reveal Board of Directors characteristics to help stakeholders, and the study of (Omar, 2014) showed that most difficult types of EM done with the approval of senior management, and in the same time complete disclosures lead to a reduction in EM. The study of (Alzoubi, 2016) showed a reverse relationship between the Board of Directors characteristics and EM, which improves the quality of financial reports in the Jordanian industrial companies while the study of (Consoni, 2017) found that Brazilian industrial companies have reduction in EM practices with the existence of Board of Directors characteristics that cover aspects needed to serve the objectives of financial statements users, where the most important Board of Directors characteristics that have an impact on EM is the FirmSiz and some financial ratios, such as ROI. Results of (Al-Absy et al., 2020) study showed a statistically significant reverse relationship between BdInd and their participation in the controlling committees and EM, and that number of meetings was one of the variables that limit or reduce the EM practices, where the large number of meetings and discussions in the controlling aspects, especially the company governance contributes to the termination or reduction of any practices outside the regulations.

Summary of the controversy indicates that previous studies have reached the same conclusion which stated: the existence of an effective Board of Directors characteristics system may lead to a reduction in EM practices, where the logical assumption says that managements of non-financial companies are working to increase the Board of Directors characteristics level to show its intention of not practicing EM. It's difficult to generalize the global studies' results on the developing economic environments, and also there is a relative shortage of researches that examined the role of Board of Directors characteristics quality on reducing the practices of earnings quality, therefore we take side to the following hypothesis:

HO: There is a statistically significant impact for the effective Board of Directors characteristics on reducing the earnings management practices.

# RESEARCH DESIGN

## Study Population, Data Sources & Analysis

Researchers collected data through the published financial reports of Jordanians non-financial companies represented by (94) companies in the industries and services sectors, for the period (2015-2020), and collected data by extrapolating the financial reports of each company and retrieving data related to the study variables, then researchers used the EVIEWS statistical software to analyze the data.

## **Measuring Study Variables**

# **Dependent Variable: Earnings Management**

Researchers relied on Jones' adjusted model, based on discretionary accruals which the best scale for EM, according to the opinion of many specialists, such as (Al Azeez et al., 2019) and obtained the discretionary benefits, as follows:

DA=TACC - NDA

TACC=NDA+ DA

Where

TACC=Total accruals

NDA=Non-discretionary Accruals

DA=Discretionary accruals

TACCit=a (1/ASSETSit-1)+a1 (Δ REVit – ΔRECit)+a2PPEit +Eit

Where

TACCit=Total accruals in year t for firm i

ΔREVit=Revenues in year t less revenues in year t-1 for firm i

ΔRECit=Accruals in year t less accruals in year t-1 for firm i

PPEit=Gross property, plant and equipment in year t for firm i

Eit=Error term (residuals) in year t for firm i

## **Independent Variables**

The study model is based on analyses that result from the ordinary least square regression analysis equation, as follows:

EM=BO+B1FSIZE+ B2SIZE+B3BIN+B4PROF+B5DISCQ

The following table shows independent variables, its measurement methods, and its sources:

Table 1 INDEPENDENT VARIABLES, ITS MEASUREMENT METHODS, AND ITS SOURCES			
Variables	Measurement Methods	Sources	
FirmSiz (FirmSiz)	Natural log of total assets	Sanjaya.	
Profitability (PROF)	Profit after tax/total equity	Che-Ahmad&	
		Osazuwa	
BdSiz (BdSiz)	The total number of directors	Abidin, Kamal&Jusoff	
BdInd(BdInd)	The proportion of non-executive directors	Kota & Tomar	
	to total directors on theboard		
Board Meeting(BdMeet)	The number of meetings held	Uwuigbe.	
	by the board in a year		

# **Descriptive Statistics & Analysis of General Hypothesis**

Table (2) shows the descriptive statistics of research variables and shows that the dependent variable (EM) is (-0.03), which is close to the studies in Jordanian environment while the arithmetic mean for independent variables amounted to (7.84) for BdSiz, (0.583) for BdInd, and (8.77) for BdMeet. Results of the descriptive analysis for study variables indicate the existence of little EM practices at the Jordanian non-financial companies listed on the ASE, but it exist and reached a maximum of (76%). Results also indicate that BdMeet consider good with 7 to 8 meetings and fit with the corporate governance rules of Jordan, and there is a medium level of BdInd with about the same weight of independent and non-independent members.

Table 2 DESCRIPTIVE STATISTICS								
	EM BdSiz BdInd BdMeet FirmSiz LOSS							
Max	0.76252	14	0.888	22	14.377	1		
Min	-0.50518	4	0	3	5.768	0		
Mean	-0.03048	7.845745	0.583	8.778	10.3	0.321		
Obs	564							

EM: Earnings management; BdSiz: BdSiz; BdInd: BdInd; BdMeet: BdMeet; LOSS: Loss; FirmSiz: FirmSiz

## **Correlation Matrix**

Table (3) shows the correlation matrix between the independent, controlled, and dependent study variables; with two variables at a time where the decision result if the value of the Multi collinearity assumption test is  $(\pm 0.80)$  will lead to undesirable effect because it means repeating the information, and indicate that Linearly overlapping variables or Collinearity give the same explanation for the same phenomenon, but results indicated that correlation values

between variables came outside this range; as a simple correlation. Therefore, there is no Multi collinearity between the independent and dependent study variables and indicates the strength of study model to show the impact of independent variables on the dependent variable (Bshayreh et al., 2020).

Table 3 CORRELATION MATRIX							
	EM	BdSiz	BdInd	BdMeet	LOSS	FirmSiz	
EM	1						
BdSiz	-0.153	1					
	0.008						
BdInd	-0.059	0.263	1				
	0.047	0.002					
BdMeet	-0.39	0.527	0.133	1			
	0.01	0.012	0.006				
LOSS	0.424	-0.138	0.018	-0.309	1		
	0.003	0.031	0.64	0.013			
FirmSiz	-0.061	0.245	0.338	0.487	-0.376	1	
	0.074	0.009	0.003	0.037	0.017		

## Multicollinearity

Researchers used this test to detect the existence level of Collinearity between the study variables, and the decision rule says that if the value of VIF is greater than 2, it indicates a Collinearity problem, and in this study there is no Collinearity because VIF for all variables were less than 2, as shown in table (4) below:

Table 4 VARIANCE INFLATION FACTORS				
Variable	Centered VIF			
BdSiz	1.17			
BdInd	1.27			
BdMeet	1.26			
LOSS	1.74			
FirmSiz	1.27			

# **Heteroskedasticity & Serial Correlation**

Researchers verified the existence level of serial correlation and heterogeneity of flexibility problems, and found that result of Heteroskedasticity correlation was simple at (0.183) and result of serial correlation test was also small at (0.203), which indicate nonexistence of serial correlation and heterogeneity of flexibility problems, as shown in table (5) below:

Table 5 PROB. CHI-SQUARE OF SERIAL CORRELATION &HETEROSKEDASTICITY TESTS				
	Serial Correlation Heteroskedasticity			
Tests Values 0.203 0.183				

#### **RESULTS & CONCLUSION**

#### **Results**

Table (6) shows the multi-regression analysis results for the impact of independent variables, which represent Board of Directors characteristics (BdSiz, BdInd, BdMeet)and controlled variables (LOSS, FirmSiz) on the dependent variable (EM), where results of the statistical analysis indicate that R-squared amounts to (0.562) and this impact is statistically significant with a p-value of (0.000). The result indicates that independent variables in this study explain (0.562) from the variation in dependent variable (EM), therefore will accept the correct hypothesis that states: "There is a statistically significant impact for the effective Board of Directors characteristics on reducing the earnings management practices".

Table 6 REGRESSION RESULTS								
Dependent Variable: EM								
Variable	Variable Coefficient Std. Error t-Statistic Prob.							
BdSiz	0.0069	0.002	3.45	0.002				
BdInd	-0.087	0.02	-4.35	0.017				
BdMeet	-0.149	0.017	-8.765	0.016				
Loss	0.094	0.006	15.667	0.007				
FirmSiz	-5.93E-07	4.93E-06	-0.120	0.297				
С	-0.058	0.008	-7.25	0.006				
R-squared	0.562	Adjusted R-squared		0.467				
F-statistic	6.631	Durbin-Watson stat		1.847				
Prob(F-statistic)	0.000							

It shows from table (6) above no impact of BdSiz on the reduction of non-financial companies' management practices listed on the ASE; with a positive correlation coefficient, therefore it's not possible to say that BdSiz has an impact on the reduction of EM practices, and this result agrees with the study results of (Al-Sartawi et al., 2010; Sanjaya, 2012; Baatour, 2017). In regard to the BdInd variable and its role in reducing EM practices, the result of B= (-0.087) means the existence of reverse relationship between BdInd and EM, where the more independent members on the Board of Directors the lower EM practices. As mentioned earlier, the BdInd members considers an important factor in preventing management from dominating its management practices in EM, as well as in terms of information consistency. Therefore, the independent members implement the agency theory more honestly because they represent related parties more, where the P-value for the variable equal to (0.017) which is a statistically significant value.

The result of this study agrees with (Alzoubi, 2016; Al-Sartawi et al., 2010) studies with regard to the Jordanian environment as well as the results of several international studies, such as (Al Azeez, et al., 2019; Marra et al., 2011; Saona et al., 2020). In relation to the impact of BdMeet numbers on reducing EM practices, it shows from the table that B-value equal to (-0.0149) which is negative and indicates the existence of an reverse relationship between the BdMeet numbers and EM, where any increase in BdMeet numbers will lead to a reduction in EM practices. The large number of BdMeet indicates the existence of an agenda that discusses the management achievements in terms of governance, and internal control, the promotion of transparency principles, and the inconsistency of information which lead to a reduction in the EM phenomenon. The result of this study agrees with the study results of (Al-Absy et al., 2020; Baatour, 2017; Saona et al., 2020).

In connection with the controlled variables, results of data analysis in table (6) indicate that disclosure of LOSS has no effect on reducing EM practices while the disclosure of FirmSiz has an impact on reducing EM practices with the evidence of reverse relationship and coefficient B-

value of (-5.93), which indicates that disclosure of business LOSS is obvious and doesn't consider a way to reduce EM while the disclosure of FirmSiz considers one of the indicators that limit or reduce EM, and this result agrees with the study results of (Consoni, 2017).

#### **Conclusion**

In general, the study found that Board of Directors characteristics performed by (94) of the non-financial companies listed on ASE contribute to reducing EM practices, and the independent sub-variables that reduce EM were (BdInd & number of BdMeet). The Disclosure about FirmSiz was also one of the controlling variables that contribute to a reduction in EM while BdSiz had no impact on reducing EM practices. These results contribute to the reinforcement of literature that deal with fields of this study and that the expansion of study phenomena can develop the literature of science that specialized in EM and factors that have impact on it, and that derived results are valid for generalization because Jordan economy is similar to the economy of many countries in Asia and North Africa.

Study results also contribute to the support of agency theory and the inconsistency of information, where the monopoly of information may not enable management to manage its earnings in a way that mislead users of financial information. Results of this study have opened up the field to expand the study to other variables that affect EM, such as internal and external audit, and the experience of board members and their specialties. It's also possible to implement this study on the industrial or multinational companies, and may also use the questionnaire as a method to collect data and analyze it, in order to change the used statistical analysis pattern.

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