EARNING MANAGEMENT AND THE INDEPENDENCE OF BOARD OF DIRECTORS: A STUDY OF FINANCIAL SECTORS IN SAUDI ARABIA

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ABSTRACT

The board structure of an organization is a significant factor in determining the success and failure of an organization. The board of directors influences the public image of an organization. The stakeholders of an organization need to be well aware of the current condition without including the managerial adjustments within the financial statements. The current study is focused on earning management and the influence of the independent board of directors within the financial institutes of the kingdom of Saudi Arabia. Earning management has a negative impact on the future progress and public image of the working institute. Jones modified model is applied to analyze the data of five different leading banks of the Kingdom of Saudi Arabia. The Regression analysis has presented results illustrating the non-significant relationship between the variables. The study has shown little to no relationship between earning management and independence of the board of directors; as, the high-level independence of the board of directors has a nominal impact on earning management activities recorded by the financial institutes of the Kingdom of Saudi Arabia.

Keywords: Earning Management, Board of Directors, Independence, Stakeholders.

INTRODUCTION

Accounting is being used to devise information, analyze and provide it to different stakeholders. However, the reporting of financial matters is dependent on the relation of a particular stakeholder. Accounting serves as a channel of communication with stakeholders that involve specific reporting in the provided period. Therefore, it is considered as the significant business entity that is required to fulfill the requirements of the various stakeholders. Furthermore, it helps in minimizing the risks and allows better strategic management for the next period (Ianniello, 2015). Stakeholders can use the reports for various purposes. However, financial data is analyzed and transformed into accounting information for strategic and business decisions. Obigbemi et al., (2016) has divided these accounting reports based on the stakeholder or users as internal and external users. Internal stakeholders are those that take direct decisions related to the internal operations of the enterprise, however, the external users are the individuals that analyze the reports to decide about their relationship with the enterprise in the future. External users can increase business terms with the enterprise and can also withdraw from the current position. However, financial reports are equally important for both groups of stakeholders.

The ability of a financial report to address all of the concerns of its users is significant to consider while designing a report (Prencipe & Bar-Yosef, 2011). The financial data is insignificant until it is transformed into a meaningful form for a specific user. The accuracy and correctness of the report and the information it contains are dependent on the provided data.

Therefore, faulty data can lead to incorrect reports and wrong decisions, ending up with high financial losses. Therefore, the value of the firm in the market is relying on accounting information in different forms.

To increase the worth of accounting information and financial reports, it is necessary to provide larger information in a way that can be used by several stakeholders (Chen et al., 2015). However, due to a large number of stakeholders with varying interests and requirements, it is hard to meet all of the requirements in a single report and the manager has to face a burden. All of the stakeholders have a divergent interest within an enterprise that results in varying needs for accounting information. Reports are designed with large information in a compact form to fulfill the needs of as many of the stakeholders as possible. However, the primary users including employees, shareholders, and managers are to be considered as a top priority to fulfill their needs.

Managers within the companies are working to analyze the financial data and to provide the appropriate reports to the specific users including themselves. However, other users are not able to contribute to the reports (Obigbemi et al., 2016). For example, a manager can decide about the increase in production by retained earnings at the detriment of the ordinary stock shareholder, or he/she can decide about taking a bank loan. Therefore, the manager can be a determining entity for most of the decisions and accounting information to be provided to other stakeholders. Therefore, the manager has immense power to control the reports presented to the capital investors and other stakeholders. Furthermore, sometimes managers can manage earnings by expense items or shifting revenues from one accounting period to the other. This can help in the reduction of total expenses in the reporting year and increase profit because of anticipation of the revenues in the future date. Along with this the negative sign in future revenue can have an impact as a delay in the current year revenue. These acts are considered to be earning management. According to an example of Enron Saga (an example of business failure), the problem arises because of the misuse of balance sheets, failure of the board of directors and management to take responsibility for the risk related to the implemented business plan, and use of structured finance and specific entities. The failure of Enron Saga is also related to the conflict of interest among stakeholders that has resulted in the unequal division of finance and power.

According to Obigbemi et al. (2016), earning management is increasing the loopholes within the financial reports to maximize the personal or organizational aims and objectives at the cost of determent of another individual or group. It is also considered as the creative accounting for maximizing the wellbeing of the organization in the yearly reports. The cases of Enron Sage and WorldCom have drawn attention towards the power and control of the managerial group in the form of earning management. To reduce such events and to improve the quality of the financial reports, the publicly trading companies include several deterrence mechanisms in financial reporting. Therefore, the board of directors is the vital observing part of the quality control of the financial reports and reporting process. Furthermore, the research has highlighted that the adequacy of the monitoring by the board of directors can be influenced by the diverse attributes and that can decrease the activity of earning management. The most influential attribute of the board of directors is found to be its independence. An independent board of directors can effectively monitor the managerial affairs and control the interests of the shareholders (Chen et al., 2015). The prior research has also highlighted that the higher level of independence of the board of directors can help in a decrease in earning management to a better extent.

Moreover, earning management has become more crucial in the financial institutes and organizations related to the financial sector. The structure of firm ownership, the board of directors, and their independence can help in earning management. However, in the case of the banking sector, financial reporting needs to be clearer and more accurate to reduce the chances of failure. Financial institutes such as banks can falsely present the current institutional conditions. However, the independent board of directors can help in reduced earning management (Obigbemi et al., 2016). Overall, earning management is divided into three sub-categories including accruals management, fraudulent accounting, and real earning management (Obigbemi et al., 2016). Mostly in the research of earning management, the accrual management is considered that is used as the discretion of accrual elements in the financial statements. Real earning management on the other hand involves changes in the regular operational activities.

The current study has analyzed five different banks for their financial reporting, independence of the board of directors, and current position. The study aims to evaluate the financial institutes within the Kingdom of Saudi Arabia and the relationship between the independence of the board of directors and earning management. Earning management and earning quality of the Saudi banks has allowed them to understand the working conditions and their future market positioning. Study if there is earning management in the 5 financial sectors (Banks) in Saudi Arabia and the association between BOD independence and earning management and earning quality.

LITERATURE REVIEW

Earning management is a topical problem that has been studied widely from various perspectives of accounting (Idris et al., 2018). However, it is completely relayed on the financial reports provided by the companies. According to the study conducted by Kelton &Yang (2008), the role of the board of directors as the monitoring entities relies on their independence from management. It allows them to have a greater capacity for monitoring and control instead of management. Most of the prior studies have examined the relationship between the high level of independence in the board of directors and the impact on the earning management. However, Klein (2002) has reported a negative relationship between the earning management and the percentage level of independence of the board of directors. Similarly, Xie et al. (2003) has also found Earning management as negatively related to the level of board independence. However, a study by Peasnell et al. (2005) has studied an adverse relation by considering the percentage of outsiders and the income increasing abnormal accruals. Also, Niu (2006) has reported the negative relationship between Earning Management and the level of independence of the board of directors. Along with this, such a relationship is also found in other countries like reported by Rajpal (2012) from India, Lee (2013) in Taiwan, Roodposhti & Cnashmi (2011) in Iran.

However, in fewer studies, like in Jordan, Abed et al. (2012) have reported no impact of the independence of the board of directors on earning management. These studies are significant because these notions are contrasting from the other available literature. The findings of Abed et al. (2012) can be justified by considering another research by Abdullatif et al. (2015) that contend that in Jordan the direct relationship among the executive and non-executive directors limits the impact on earning management. The exact relationship of the independence of the board of directors and the earning management can't be evaluated in the case of Jordan because of the dependent board of directories and involvement of management. Because of such a relationship in Jordan abnormal accruals are recorded. However, unlike these researchers, most of the prior literature supports the indirect relationship between the independent board of directors and earning management. Jaggi et al. (2009) has also evaluated the relationship of the earning management and independence of the board of directors in Hong Kong and found it to be weakly related to each other. Furthermore, the prior study has also highlighted the relation of earning management and independence of the board of directors is less effective in constraining earning management in the family-owned business unlike in the non-family-owned business. Most of the studies conducted in the US and UK have tested the relationship of independence of the board of directors and earning management and provided varying results (Hashim, 2011). However, there are no conclusive results about the earning management and independence of the board of directors.

Moreover, the relationship between earning management and independence of the board of management is unclear in the kingdom of Saudi Arabia and also in the financial institutes. Therefore, the study is designed to evaluate the relation of earning management and independent board of directors in the kingdom of Saudi Arabia in the financial institutes (banks). The institutional environment is also the determining factor in earning management. The hypothesis is tested, and results are evaluated to estimate the impact of variables on each other. The following are the hypothesis created to analyze the relationship of earning management and independence of the board of directors.

H_1: Board independence has a significant impact on the reduction of earnings management.

H_0: Board independence has no significant impact on the reduction of earnings management.

RESEARCH METHODOLOGY

The research is designed based on the financial institutes (banks) of Saudi Arabia. Five leading banks of the Kingdom of Saudi Arabia are selected to examine earning management and the influence of the independent board of directors. Financial institutes such as banks are largely dependent on accounting reports and it is significant to reduce earning management. Earning management is considered to be unethical that is designed by the manager to report the favorable conditions in the financial statements. The study is designed to evaluate the earning management in the banking sector of the kingdom of Saudi Arabia. The selected five banks for data collection and analysis include Riyad Bank, Albilad bank, bank Aljazira, Alrajhi bank, and Saudi Investment bank. These are selected as the leading banks of the kingdom of Saudi Arabia. Furthermore, the financial reports from the year 2010 to 2019 (of 10 years) are considered as the data for evaluation.

For data evaluation, the Jones model is adopted. Jones's model is adopted as it can allow the detection of earning management. Accrual-based earning management can be detected using the jones model that is further extended to be adopted for the better detection of earning management in the financial reports of different institutes. Standard Jones's Model of 1992 uses the two-stage approach by dividing the managed and unmanaged components of the total accrual (Chen et al., 2015). Total accrual (TA) is regressed to change in sales (ΔREV) and the gross level of property, plant, and equipment (PPE). The second stage of earning management detection in the Jones Model involves the estimated parameters from the developed regression model with TA, ΔREV, and PPE for the considered period (Chen et al., 2015). The technique helps in evaluating the abnormal components of total accruals. PPE and ΔREV are the determining factors for the regression stage of unmanaged accruals. Under the Jones method of 1992, the total accrual can be calculated using the formula. The model assumes that all changes in deferred sales during the study period arise from earning management practice. The total receivable is estimated, depending on cash flow approach during the study years for each year separately using the following equating:

$$TA = NIO – CFO$$

Where, TA: Total accruals in year t
NIO: Net income in year t
CFO: Cash flows from operating activities in year t

The extended Jones model of 1995 is adopted because it considers the sales-based earning management (Garcia, 2008). However, in terms of absolute terms, both models are considered to provide low power to the earning management of the economically plausible magnitude.

$$\boldsymbol{TAC_{it} = B_0^1 + \overline{B_1(A_{i_{(t-1)}})} + \left(B_2 \frac{\Delta REV_{it} - \Delta REV}{A_{i_{(t-1)}}}\right) + \left(B_3 \frac{PPE}{A_{i_{(t-1)}}} + \sum it\right) A_{i_{(t-1)}}}$$

Where, TAC_{it}: Total Accruals
$Ai_{(t-1)}$: Assets of the prior year
ΔREV_{it}: Change in revenue
ΔREC: Change in receivables
PPE: Property, plant, and equipment
B_1, B_2, B_3: Coefficient Values
$\sum \mathbf{it}$: Express random error, and represent discretionary receivables, which reflect lack of earning quality.

RESULTS AND DISCUSSION

The earning management and independence of the directors are the two dependent and independent variables, respectively. The financial institutes of Saudi Arabia under study are the leading banks and financial organizations that show the different percentage of independence of their board of directors. As shown in Table 1, the percentage of independence of the board of directors varies each year; the earning management also has variable values for each year. The different banks of Saudi Arabia have different independence level; the descriptive statistics and variance mean test shows weak relation of the percentage of independence of directors and earning management of the banks. The mean value of earning management shows a minimal deviation concerning the independence percentage of directors. To test the hypothesis a regression analysis was performed in which the profit quality is a dependent variable and the independence percentage of directors is independent. The interaction of these two variables appears to be symmetrical. The results are devised to relate the independence of the board of directors and earning management. The results from the year 2010 to 2019 are listed in the percentage value in Table 1.

Below Table 2 shows the average earning management for each year. As the results suggest a fluctuating average of earning management for each bank; the year-based difference is determined by estimating the TA value for each year. The estimated values of TA are different for each year that shows the deviating nature of earning management for the year. The parameters are defined in Table 2 concerning the variable of earning management; we expect a negative correlation of earning quality with the independence percentage.

Table 1 INDEPENDENCE PERCENTAGE				
Result	**Independence Percentage**	**Independent**	**Executives**	**Year**
1	64.00	32	18	2010
1	64.00	32	18	2011
1	62.50	30	18	2012
1	57.14	28	21	2013
0	38.00	19	31	2014
0	46.94	23	26	2015
0	44.00	22	28	2016
0	38.78	19	30	2017
0	38.78	19	30	2018
0	45.28	24	29	2019

Table 2 EARNING MANAGEMENT						
Result	**Average**	**Absolute Value**	**DA**	**NDA**	**TA**	
0	17,476,258.63	3,532,857.06	425,179.12-	0.12	425,179.00-	2010
0	17,476,258.63	16,598,715.09	12,076,559.12-	0.12	12,076,559.00-	2011
1	17,476,258.63	24,303,669.03	10,896,509.12-	0.12	10,896,509.00-	2012
1	17,476,258.63	23,857,043.05	3,258,819.11-	0.11	3,258,819.00-	2013
1	17,476,258.63	17,879,918.98	3,748,994.90	0.10	3,748,995.00	2014
1	17,476,258.63	26,944,477.94	25,894,753.92	0.08	25,894,754.00	2015
1	17,476,258.63	22,262,471.99	5,652,498.08-	0.08	5,652,498.00-	2016
1	17,476,258.63	7,610,398.03	1,868,742.10-	0.10	1,868,742.00-	2017
0	17,476,258.63	11,788,919.11	11,788,919.11-	0.11	11,788,919.00-	2018
1	17,476,258.63	19,984,116.06	18,909,006.12-	0.12	18,909,006.00-	2019

DESCRIPTIVE STATISTIC

When analyzing the banks of Saudi Arabia; the results do not provide clear insight into the percentage limit of earning management. The non-significant relationship shows interesting descriptive findings (Cornett et al., 2009). The ability of the board to safeguard the earning management remained the same for different percentages of independence. The study is significant in terms of corporate governance and the ethical code of conduct of the banking system. Though, none of the banks in the analysis is owned by a family; most of the family's businesses are prone to be impacted by the single stakeholder rule. The difference of means shows no relationship between the independence of the board and the earning management of these banks Table 3.

Table 3 DESCRIPTIVE STATISTIC OF VARIABLES ACCORDING TO BANK			
Bank		**Earning Management**	**Dependent Percentage**
Riyad bank	Mean	4383278.199	56
	N	10	10
	Std. Deviation	2134510.268	11.73788
Bank Albilad	Mean	1876840.407	48.9
	N	10	10
	Std. Deviation	1656427.69	13.40357
Bank Aljazira	Mean	2343312.817	41.4
	N	10	10
	Std. Deviation	1416181.954	17.37303

Alrajhi bank	Mean	6352708.407	45.2727
	N	10	10
	Std. Deviation	4501262.138	13.1167
The Saudi Investment bank	Mean	2520118.803	54.8
	N	10	10
	Std. Deviation	3035959.495	28.91674
Total	Mean	3495251.727	49.2745
	N	50	50
	Std. Deviation	3154401.993	18.17522

Table 4 shows the variance of mean and the testing of hypothesis based on values calculated. The mean-variance testing shows significance values for both parameters that show a weak relationship between these two parameters. The established F values are further subjected to the ordinary T-test to check the extent of the relationship between the independent and dependent variables.

Table 4
VARIANCE MEAN TESTING

			Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Earning Managemen t* Bank	Between Groups	(Combined)	138507523655943.00	4	34626880913985.80	4.464	0.00 4
	Within Groups		349054820933292.00	45	7756773798517.59	-	-
	Total		487562344589235.00	49	-	-	-
Dependent Percentage* Bank	Between Groups	(Combined)	1539.257	4	384.814	1.182	0.33 1
	Within Groups		14647.331	45	325.496	-	-
	Total		16186.588	49	-	-	-

REGRESSION MODEL AND HYPOTHESIS TESTING

The Model evaluation in this research with model predictions using Ordinary Least Squares (OLS) to estimate parameters and predict relationships of causality, by evaluating the outer model and inner model (Shen, 2020). Based on the Jones extended model, regression is applied to the parameters to analyze the earning management in the banking sector of the kingdom of Saudi Arabia. Hypothesis testing, based on the data processing, the form of total effects is shown in Table 5, below in hypothesis testing.

Table 5
T TEST FOR DIRECT IMPACTS

Model	**Unstandardized Coefficients**		**t**	**Sig.**	**Note**
	B	**Std. Error**			
(Constant)	0.333	0.095	3.502	0.001	Significant
DEPEDENT PRECENTAGE	0.188	0.14	1.343	0.186	Not Significant
R	0.190a				
R Square	0.036	-			
Adjusted R	0.016	-			
F	-	Not Significant			
ŷ = (333) +. .188X					

The coefficient of correlation is used to calculate the relationship between the independent variable and the dependent variable (Chi et al., 2020). From the analysis of the above Table 5, we got the result of R is 0.190 which shows a weak relationship. The coefficient of determination is used to calculate the influence or contribution of the independent variable toward the dependent variable (Kapoor & Goel, 2017). From the analysis, we got the result of R2 is 0.036. This means that the 4% "*Earning Management*" variable will be influenced by the independent variable that is "*Percentage of Independence*".

The result hypotheses testing between Percentage of independence and the earning management indicates T-test is 1.343 while P value (0.186)>α=0.05 then influence of X1 (Percentage of independence) toward earning management results is not significant. Means, accept H0, and reject H1. It indicates that the Percentage of independence does not affect the earning management the regression model and T-test analysis estimate there is no significant relationship between the board of director's independence and earning management. It also analyzed other parameters are associated with the earning management that is corporate ethics, and code of conduct.

CONCLUSION

The study aims to investigate the impact of parameters that define the independence of the directors and their relationship with the earning management of the Saudi Arabian banks over ten years. Concerning each parameter examined, the null and alternative hypotheses of the study are devised and tested by applying the Jones Regression Model on the data of the list of 10 banks. The comparison between the dependent variable "*Earning Management*" and the independent variable "*Independence Percentage*" made it possible to observe the extent of effectiveness of each variable on the other. In regard, to the earning management, each bank has its value that fluctuates each year; the independence of directors also differs from bank to bank. The regression testing model suggests a weak relationship between the independence of directors and the earning management of the banks. The results suggest that the independence level of directors does not impact the earning management of the Saudi Arabian banks. However, the research contributes to several insights into the relationship examined, but there are some limitations. The study is limited to Saudi Arabia, and it would be interesting to analyze different banking from across the globe. It is also important to compare different financial institutes of the Country including different corporate sectors.

The research has interesting results that can be implemented both by scholars and practitioners that have an interest in earning management and corporate governance. The research presents one of the few studies concerning a specific region (Saudi Arabia) and the topic of earning management; the issue of earning management is quite detrimental for family-owned businesses, but the corporate governance issues are also high in other businesses. The study offers a debate on the topic of new strategies to govern the financial organizations their structuring and composition of the board of directors. The study also highlights several features associated with the independence of the board of directors and earning management. The research offers an interesting path for future research. It is a valuable contribution that examines the banking system of Saudi Arabia their earning management, and the role of independence of the board of directors.

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