Moderating Effect of Voluntary Disclosure Quality on The Relationship Between Earnings Management and Cost of Capital

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Abstract

Earnings management is one of the most important issues that determines the financial position of the companies. However, the method that influences the expectations of investors are the firms that need to be credible, transparent, and more informative about their activities, because when the firms' stocks have more liquid, the ability to attract investors will increase and it will obtain the necessary funds for their various activities. Therefore, this study investigates the moderating effect of voluntary disclosure quality on the relationship between earning management and cost of capital. That is, the direct relationship between earnings management and cost of capital and as well as the indirect relationship which moderated by voluntary disclosure quality. The study employed panel data analysis to an initial sample of 191 listed companies in the Amman Stock Exchange (ASE) covering 10-years period between 2010-2019. However, we sampled 99 nonfinancial listed companies on the Jordan Stock Exchange. The results of this study show that voluntary disclosure does moderate the relationship between earnings management and the cost of capital. This is because, the companies do not manage their debt profile effectively and efficient in order to improve their earnings management attractive. Low voluntary disclosure could lead to low earnings management, thus, decrease cost of capital. This study contributes to the literature by using cost of equity capital and cost of debt simultaneously and as far as the researcher's knowledge, there are no studies that had addressed this issue yet in Jordan. It is useful for Jordanian regulators and policymakers (e.g., Amman Stock Exchange (ASE), Companies Control Department).

Introduction

Many companies face with the problem of optimal resource exploitation. Therefore, companies have to expand the commercial business and execute it. Examples of this may include, the purchase of fixed assets and intangible assets that oblige the company to cover the prices through capital collection from the company's internal and external resources. In addition, in order to cover these assets costs, the company has to achieve the best return. Usually, asset costs related to the investment risks usually exist when the actual return differs from the projected one, meaning that it is for the investor to increase the expected return when the level of investment risk increases (Porras, 2010).

In this regard, the investors have two types of risks: the first relates to the dominance of some shareholders over the authority outside their interest, and the second relates to the managerial behavior of managers, which may increase the potential risks for the company (Ghouma, 2017). Therefore, it is necessary for managers to stay away from any personal interests when providing investors with financial data, because any inaccurate information may lead to an increase in information risks and thus an increase in the cost of capital for the company (Candra and Ekawati, 2017). These risks will lead to a loss of confidence of investors, lenders and other stakeholders. Consequently, it will cause a kind of concern for the company and may cause it financial problems, which leads to weakness in the capital markets and the economy.

Financial reports are the main source of financial information, that are issued by corporate entities to external users. IFRS (2012) defined financial reports as the outcome of institutions' operations which provides information that is useful to 1) external users, 2) current and potential investors, and 3) creditors in making rational investments. Mckee (2005) argued that any attempt to alter financial reports, would decrease their reliability. This is called "earnings management''. It seeks to mislead users of financial statements in a way that does not reflect the actual profits, in order to achieve certain objectives (Ayers et. al., 2006). Disclosure enhances the transparency of financial reports. It contributes towards increasing the quality of the accounting performance reported. It provides additional information that assists stakeholders to better understand the core of the economic activity of the company. In addition, it supports in assessing the potential risks associated with recognized and unrecognized items.

Accounting disclosure establishes trust among stakeholders and eliminates fraud due to incorrect information. Thus, a superior accounting information quality encourages corporate transparency, which is essential in enabling shareholders to exercise their rights. It is a strong tool in ensuring corporate conduct, protecting the rights of investors, and maintaining confidence in the capital markets. On the contrary, poor accounting disclosure may lead to the lack of market integrity and unethical behavior, which, increases cost of capital and affects profits.

The Jordanian Capital Market

The Amman Stock Exchange (ASE), the sole Jordanian capital market authorized to trade securities, was founded in 1976 with the help of the International Finance Corporation and the Central Bank of Jordan (IFC). The ASE is a private, non-profit legal entity that has financial and administrative autonomy under the Jordanian Securities Commission's oversight (JSC). Jordan's equity market capitalization in 2004 was $11.3 billion, or 113% of its GDP in 2003,

making it one of the largest emerging equities markets globally (Haddad et al. 2015). In Jordan, Amman Stock Exchange is considered the most developed in the Middle East and North Africa region, and foreign investment in the Jordanian capital market is one of the highest in the world.

According to the 2014 Amman Stock Exchange report, Jordan is distinguished by the fact that half of its total market value consists of foreign ownership. This means that any failure or weakness in the Jordanian capital market may have significant repercussions. On the other hand, the Middle East has witnessed in recent years many conflicts or what is known as the "Arab Spring". Jordan managed to protect its stability while neighboring countries suffered from these conflicts. These conflicts led to the flight of capital from neighboring countries such as Syria, Yemen and Iraq to Jordan.

Furthermore, doubts related to corruption, financial, administrative and legal violations increased in many public joint-stock Companies Included Amman Financial Market. These corruption were transferred to the attorney general, and a large number of them and the loss of wealth and savings of thousands of shareholders in these companies, the market value of the shares of the covered companies decreased from 41 billion dinars to 17 billion dinar (Dabbas, 2017). In this regard, the ASE's performance seems comparable to a few particular emerging Arab securities markets located close to Jordan and sharing similar socioeconomic traits. 165 Nearly all of these nations especially those in the Arab Gulf that produce oil—are in a far better financial situation than Jordan. Despite this, the ASE statistics show how well the ASE has done in boosting the country's economy. In terms of market capitalization as a proportion of GDP, it should be emphasized that the ASE was placed first among Arab securities markets according to a statistical comparison for the period between (1999-2013) (AL-TAL, 2014). These conditions makes the Jordanian capital market a unique feature to be highlighted. The financial markets in which long-term debt (over a year) or equity -backed securities are bought and sold is called capital markets. These markets born in response to investor demands and needs.

The Jordanian capital market as other capital market in the world allows a variety of investment choices. These include common and preferred shares (constituting ownership), and debt securities with a varying maturity (constituting a debtor-creditor relationship), and it trying to find its place into efficient markets.

Literature Review

Defining an accurate concept of the cost of capital is an important and decisive factor in financial decisions. Therefore, many researchers addressed the concept of cost of capital from different perspectives. It is the expected return to satisfy both financiers and tax authorities (Shoven and Topper, 1992). Refers to rate of return to attract money from a specific investment as required by the market (Pratt, 2003). Defined as the expected return on the company's shares (Gao, 2010; Lambert *et. al.,* 2007). COC is the sum of risk-free return and risk premium (Hughes *et. al.,* 2007).

It is the expected rate of return that the market participants require in order to attract funds to a particular investment (Pratt and Grabowski, 2008). It leads to stability in the economic value of the company (Salteh *et. al.,* 2012). Refers also to the minimum return expected from the suppliers of the capital components, i. e, investors and creditors, as the expected return on any investment opportunity must not be less than the cost of capital needed to finance the project (Fernandes, 2014).

The required return from the investors in order for the company to meet the total targeted returns, and therefore, the capital must be allocated efficiently within the company, so the company can only increase the value of shareholders' equity if the company is able to generate returns that exceed the cost of the capital (Schlegel, 2015). It is the expected rate of return that leads to the stability of the value of the economic unit (Patro and Kanagaraj, 2016). A cost to the company in order to obtain the required funds from debt holders and equity (Ezat, 2019). He also mentioned that the capital structure has its sources divided into two parts; one related to financing as bondholders, and the other related to equity such as dividends. Cost of capital can also be considered as what is required by financiers to invest their money in the company (Utami and Pernamasari, 2020). Therefore, COC can best be defined as the minimum rate of return on which each new investment is considered a rewarding business.

Capital financing has major sources of debt and equity (Rayan, 2008). This combination should increase the company's value by reducing the cost of capital, because if it is greater than the expected return, it will affect the establishment in the form of a decrease in its economic unit (Patro and Kanagaraj, 2016). The improving liquidity and reducing capital costs are among the most important factors related to company shares (Easley and O'hara, 2004). Therefore, cost of capital is an important criterion for capital budgets and performance measurement.

Many modern companies also seek to attract capital based on an acceptable rate of capital markets. This cost is important for making any investment decisions given that at any investment opportunity the expected return should not be less than the cost of capital needed to finance it, as it is used to evaluate new and existing investment projects (Fernandes, 2014). In addition, it determines the value of the company as it relates to future cash flows as viewed by external investors (Baule, 2019).

It has to be noted here that returns and risks are important factors, so a balance must be reached among them by choosing capital that raises the value of the company and reduces the cost of capital (Saputra *et. al.,* 2015). Access to an ideal capital is one of the most difficult things managers may face when expanding their company business. This requires either the issuance of shares or through external debt or both (Tsoy and Heshmati, 2017). In addition, better performance is essential for managers when using their debt and equity strategies (Ameen and Shahzadi, 2017). The cost of capital is divided into a part relating to equity of those who have invested their shares in the company, and another part related to lenders who have invested in the same investment (Damodaran, 2016).

In emerging markets where the high information risk index is usually high due to a lack of information resulting from low confidence in financial reports, equity cost rights are an important indicator used to assess the efficiency of the company and its ability to invest money in (Fernando *et. al.,* 2010). The effect of the cost of equity is less when it comes to dividends than the cost of debt, because dividends are determined by shareholders provided that the company determines the amount that to be paid, while the returns on debt are fixed under a contract with creditors (Nikoomaram *et. al.,* 2016).

Equity is issued in the form of ordinary and preferred shares. One of the most important advantages of financing equity is that the company is not obligated to pay the interest and the basic payments, its risk is less, and it increases the cash flow of the company. This contributes to the growth of its commercial business and the commitment of investors in the long term, and thus the company is not obligated to process the immediate payment of their return on investment. In contrast, there are several disadvantages, including the high cost of equity and that, the shareholder has the right to vote and this affects the decision-making in

the company (Sharma and Chadha, 2016). COE is a key issue in the decision-making processes within companies, as it is a key component of the total cost of capital (Cotner and Fletcher, 2000). This means that an increase in the cost of equity will lead to the possibility of investment rejection that may affect the company's future growth (Embong *et. al.,* 2012). Many researchers addressed the concept of cost of equity capital in their studies. Cost of equity capital is the minimum rate of return equity investors require for providing capital to the firm (Botosan, 2006). It is the rate of return that investors demand for their investment in the company, which represents the alternative opportunity cost that could have been obtained from alternative investments that had the same level of risk (Daske *et. al.,* 2006).

Refers to also to the expected return on ordinary shares in the stock market, which represents the compensation required by shareholders in order to finance the company's investments in light of the associated risks, indicating that the cost of equity reflects the cost of the alternative opportunity to invest in the company's securities versus other investments that have the same level of risk (Witmer and Zorn, 2007). COE is the rate of return that investors require on an equity investment in a firm (Pratt and Grabowski, 2008). It is the minimum rate of return a firm must offer to compensate stockholders for their bearing some risk (Swee Sim and Kim Leng, 2009).

Cost of equity capital is the rate of investment that investors use to discount future expected cash flows to arrive at the current stock price (Rakow, 2010). It was defined also as the return which the firm pays to investors to compensate for the risk they undertake by investing their capital in the company (Eid, 2015). Defined also as the cost incurred by the company to meet the level of return on investment expected by the investor for an investment that has the same risk (Putra *et. al.,* 2016).

Some researchers use the term 'cost of ordinary shares' to refer to cost of equity, which is defined as the rate of return required by investors for their investments in ordinary shares, and that must not be less than the return that can be obtained if the same amount is invested in other investments that have the same risk, so that any decrease in the expected return on the cost of equity capital of ordinary shares will lead to a decline in the economic value of the company too (King, 2009; Beigi *et. al.,* 2016; and Baker and Al Thuneibat, 2011). Therefore, the COE can be considered as an expected dividend per share on the current market price per share. However, the need for an analysis of issues related to the capital structure is increasing, especially in light of severe financing constraints (Santosuosso, 2014). This is reflects in the image of stock volatility and a slowdown in bank lending that was the result of the global economic crisis.

According to the agency theory, debt financing is a tool to control the restriction of the trend towards opportunistic behavior for personal gain by managers. Debt financing reduces free cash flows within the company by paying fixed interest payments and in the process, it forces managers to avoid negative investments and work for the benefit of shareholders. Reducing the debt to total capital used is desirable for weak companies and may solve problems, albeit temporary. In the long run, it will be dangerous to the financial position of the company and may cause loss of investor and stakeholder confidence, as well as the difficulty of making money in the long term (Njeri and Kagiri, 2013).

Investors prefer debt financing because through COD they ensure that payment is made in subsequent periods in the form of returns, whereas equity is considered a negative indicator for them because the shareholders or the old owners do not allow new shareholders to take their shares of the profits (Myers and Majluf, 1984). There two types of debt financing; long-term debt and short-term debt. So many researchers have distinguished them according to

their impact on the company's value and financial performance (Kodongo *et. al.,* 2014). Long-term debt is used to finance investment decisions and the cost of this debt depends on how sound the balance sheet is (Adeyemi and Oboh, 2011). The assessment of the debtor's financial performance is dependent on financial information when determining the contractual terms of the loan in order to reduce problems, because this will be reflects in interest rates. This means that a company that has high quality of information will bear a lower cost than companies that bear a high cost of debt because of the existence of information risks that are reflected in the quality of financial information badly (Carmo *et. al.,* 2016).

Capital that is financed by debt is called leverage, when at any increase in debt the leverage increases and thus the financial risk increases (Kangarlouei *et. al.,* 2013). Any increase in leverage will lead to an increase in the value of the company, but to a certain extent, after that, the total cost of capital will rise, which leads to a decrease in the market value of the company (Chowdhury and Chowdhury, 2010).

The cost of debt is less than that of equity because it is less risky, and therefore an increase in debt is likely to reduce the weighted average cost of capital (Luiza, 2017). It is less than the cost of equity capital, because interest on debt is a tax deduction. In contrast, it is considered riskier because it will be paid whether the company makes profits or incurs losses.

Underpinning Theory
Signaling Theory
According to this theory, companies could gain investors' confidence and procure economic resources if they disclose more information in the financial reports (Birjandi *et al*., 2015). It enhances external parties' confidence in the company by reducing inconsistent information. This is because any concealment of information by managers may affect the relationship with stakeholders (such as investors and creditors) (Boshnak, 2017). To enhance the confidence between these parties, firms should preserve shareholders' trust by issuing financial reports that are complete, accurate and reliable to reduce information asymmetry and agency cost (Alzoubi, 2016).

In addition, it is important to allow investors to discern the precise details of the company's position in terms of its risks and expected return (Hasan *et. al.*, 2017). This leads to better decisions and optimal allocation of economic resources due to the presence of understandable, accurate and timely information. This could help in maintaining the firm's market reputation and establishing confidence among investors. Non-disclosure can have negative implications. For example, investors and lenders could opt to be more cautious about investing in companies that do not reveal enough details. This could lead to a decline in the companies' stock price and result in a higher interest rate being paid. Company disclosure promotes trust between executives and customers, which plays an important role in minimizing information asymmetry problems (Healy & Palepu, 2001). Voluntary disclosure provides reports that managers consider relevant to the needs of various groups of stakeholders, including financial and non-financial details (Meek *et. al.*, 1995). Such disclosures result in a decline in the asymmetry of information and provide clarity between executives and investors (Boesso & Kumar, 2007).

Furthermore, there is a complementary relationship between the quality of information and voluntary disclosure. The inverse relationship between earnings quality and voluntary disclosure has been found in previous studies (Francis et. al., 2008; Wu et al., 2014). In contrast, Verrecchia (1990) found a substitutive relationship between earnings quality and

voluntary disclosure, in which, less (more) expansive reports are provided by firms with good (poor) earnings quality. Consequently, there is a lower (higher) knowledge asymmetry between investors and the company.

Methodology

The study focuses on the nonfinancial companies in Jordan and has been administered for the collection of data. The nonfinancial firms as well as other industrial sector accounts has contributed 85 percent of the total GDP. The research assesses the performance of non-financial firms listed in the Amman Stock Exchange during the period between 2010 and 2019. The non-financial firms in Jordan are important to the economy since the industrial and service firms were used as a measure of economic growth and a major source of employment in Jordan (Marashdeh, 2014). The data were obtained from Securities Depository Center (SDC), Jordan Securities Commission (JSC), and Amman Stock Exchange (ASE). However, there are two sectors that exist in Jordan stock market: (i) the financial and (ii) non-financial firm's sector. This research excludes financial firms and insurance sectors due the disclosure system and the standards of financial reporting for those institutions vary from other sectors. Earlier studies also excluded these sectors from their sample (Kim *et.al.*, 2018; Orazalin and Akhmetzhanov, 2019; Alhadab, 2018). This research opted for the non-probabilistic sampling method to collect data from the Amman Stock Exchange. All industrial companies in Jordan registered in the Amman stock exchange was included in this study. In the same vain, there are overall 191 companies that were registered in Amman Stock Exchange, we were able to derived 99 sample from the total population of 191 that is used in the study. All the data were collected from the company's annual report which is available on the websites of controlling and regulatory bodies, such as, ASE, SDC and JSC. Furthermore, after the collection of sufficient data that matched the minimum sample size requirements, the researchers summarized and analyzed the data using quantitative approach by utilizing using STATA to examine the hypotheses.

Research Model

The current study developed the following models to determine the impact of exploratory variables on cost of capital. The equation (1) was designed to examine the direct impact of earning management on the cost of capital. Model 1 tests two hypotheses; H_{1a}, H_{1b}. Model 2 tests H_{2a}, H_{2b}. \ H_{1a}, H_{1b}, were formulated to examine the direct relationship between earning management and cost of capital as the follow equation

Model (1a)

$$COE_{it} = \beta_{0+} \beta_1 REM_{it} + \beta_2 AEM_{it} + \beta_5 Size_{it} + \beta_6 Lev_{it} + \beta_7 ROA_{it} + u_{it}$$

Where;
COE = The cost of equity
i = a company and t = year
β_0 = intercept measures the expected value of the risk-free rate if the regression equals to zero
β_1 = the coefficient of the independent variable
REM = Real Earnings Management
AEM= Accrual Earnings Management
$Size$ = company size
Lev =Leverage
ROA =Return on Assets

u = the error term

Model (1b)

$$COD_{it} = \beta_0 + \beta_1 REM_{it} + \beta_2 AEM_{it} + \beta_5 Size_{it} + \beta_6 Lev_{it} + \beta_7 ROA_{it} + u_{it}$$

Where;

COD = The cost of debt

i = a company and t = year

β_0 = intercept measures the expected value of the risk-free rate if the regression equals to zero

β_1 = the coefficient of the independent variable

REM = Real Earnings Management

AEM = Accrual Earnings Management

$Size$ = company size

Lev = Leverage

ROA = Return on Assets

u = the error term

H_{2a}, H_{2b} were formulated to examine the role of voluntary disclosure quality on relationship between earning management and cost of capital as the follow equation:

Model (2a)

$$COE_{it} = \beta_0 + \beta_1 REM_{it} + \beta_2 AEM_{it} + VDQ_{it} * REM + VDQ_{it} * AEM + \beta_5 Size_{it} + \beta_6 Lev_{it} + \beta_7 ROA_{it} + u_{it}$$

COE = The cost of equity

i = a company and t = year

β_0 = intercept measures the expected value of the risk-free rate if the regression equals to zero

β_1 = the coefficient of the independent variable

REM = Real Earnings Management

AEM = Accrual Earnings Management

$Size$ = company size

Lev = Leverage

ROA = Return on Assets

u = the error term

$VDQ_{it} * REM_{it}$ = An interaction between voluntary Disclosure Quality and Real earnings management.

$VDQ_{it} * AEM_{it}$ = An interaction between voluntary Disclosure Quality and Accrual earnings management.

Model (2b)

$$COD_{it} = \beta_0 + \beta_1 REM_{it} + \beta_2 AEM_{it} + VDQ_{it} * REM + VDQ_{it} * AEM + \beta_5 Size_{it} + \beta_6 Lev_{it} + \beta_7 ROA_{it} + u_{it}$$

COD = The cost of debt

i = a company and t = year

β_0 = intercept measures the expected value of the risk-free rate if the regression equals to zero

β_1 = the coefficient of the independent variable

REM = Real Earnings Management

AEM = Accrual Earnings Management

$Size$ = company size

Lev = Leverage

ROA = Return on Assets

u = the error term

$VDQ_{it}*REM_{it}$=An interaction between voluntary Disclosure Quality and Real earnings management.

$VDQ_{it}*AEM_{it}$ =An interaction between voluntary Disclosure Quality and Accrual earnings management.

Data Analysis and Results
Table 1
Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Cost of Equity	990	2054.98	764.96	388	3585
Cost of Debt	990	734.72	295.49	88	1501
Real Earning Management	990	959.83	407.64	142	1860
Accrual Earning Management	990	36.809	139.21	74	973
Voluntary Disclosure Quality	990	1785.76	692.12	253	3201
Leverage	990	751.561	487.673	301	481
Firm's Size	990	269.68	101.62	60	710
Return on Assets	990	669.54	284.57	81	1389

From the analysis above the descriptive table shows the means value of cost of equity as a proxy of cost of capital for the dependent variable has a mean value of 2054.98. While the SD was 764.96. It also shows that 36.8% of the companies have an accrual earning management. Moreover, when evaluate the time range for which reported the real earning management is indicated, the analysis becomes much more amazing, as it enables the firms to determine whether the voluntary disclosure quality has past or future effect on the weighted average cost of capital such as cost of equity and cost of debt. However, the table above also shows that no company have experienced loss during the period of operation in Jordan. This is because, all the variables in the means values do not show any negative figure in the analysis. Therefore, the firms were able to effectively and efficiently use their debt and equity for the sustenance and survival of the companies over a period of time. The findings indicates a greater prevalence of non-time and historical data, which is consistent with previous research findings (Seta & Setyaningrum, 2018; Habtoor, et al., 2019; Oliveira, et al., 2011; Adamu, 2013; Rajab & Handley-Schachler, 2009).

Table 2
Correlation Matrix

Variables	COE	COD	REM	AEM	VDQ	LEV	F. SIZE	ROA
Cost of Equity	1.000							
Cost of Debt	0.641	1.000						
Real Earning Management	0.152	-0.26	1.000					
Accrual Earning Management	0.202	0.310	-0.471	1.000				
Voluntary Disclosure Quality	0.351	0.462	0.223	0.143	1.000			
Leverage	0.279	0.259	-0.06	0.321	-0.06	1.000		

Firm's Size	0.511	0.027	0.513	0.641	0.218	-0.32	1.000	
Return on Assets	0.267	0.112	0.461	0.336	0.461	0.268	-0.25	1.000

The correlation analysis is used as a techniques or tools to determine the level of relationship between each variable that was tested. The correlation of ± 1 is indicates perfect positive or negative relationship. It started from 0 which shows no relationship between the two variables. From the Table above, the cost of equity has a positive relationship with REM, AEM,VDQ, LEV, Firm's Size and ROA. Besides that, there is a negative relationship between Cost of debt with value of -0.26 with REM, AEM,VDQ, LEV, Firm's Size and ROA. However, Numerous studies hypothesized that relationships between covariates exceeding the 80% threshold could be the source of multicollinearity. The issue of multicollinearity does not emerge as a result of this study. Similarly, the calculation of Variance Inflation Factor (VIF) was conducted to assess the findings' robustness. According to some researchers, the VIF threshold is eight, while others said, it is at ten. Despite this, the data indicates that all the explanatory variables are smaller than the VIF level established by researchers. Therefore, based on the above table, we can state categorically that the model is not affected by the multicollinearity issue. Furthermore, to determine whether the error term is homoscedastic or not, we used the Breusch-Pagan test.

Table 3
Regression Result

Variables	Coefficient	Standard Error	t-value	p-value
Cost of Equity	316.832	12.831	8.24	0.000
Cost of Debt	228.101	24.337	9.37	0.000
Real Earning Management	161.668	34.997	4.62	0.000
Accrual Earning Management	-46.530	59.448	-0.78	0.035
Voluntary Disclosure Quality	374.581	21.749	4.94	0.421
Leverage	10.342	19.204	0.54	0.591
Firm's Size	588.324	84.684	6.95	0.000
Return on Assets	-191.091	119.896	-1.59	0.113
Constant	-409.271	244.893	-1.67	0.096

At the 1% level, the F-statistic for the regression model is statistically significant (0.000). The F-test and R-square values are 45.58 and 0.593, respectively. The number shown by R-squire indicates that the model's explanatory variables explained approximately 59.3 percent of the earning management quality disclosed by firms. The cost of equity and cost of debt were statistically significant at the 1% level of significance. Real earning management and Accrual earning management were also significant. This indicates that the REM and AEM has significant relationship with the cost of capital. As such, this relationship could improve the performance of the company and attract confidence from the investors and shareholders of the firm. However, the controls variables were not statistically significant such as Leverage and ROA. Furthermore, the firm's size has a positive relationship with the cost of capital. This indicates that, the higher the size of the company the more attract would made to financial providers. Moreover, we conducted the Hausman specification test on the fixed effect and random effect models to see which model fits the data the best. Following the analysis, the chi-square statistic indicates an absolute value of 8.293, while the p-value is 0.141. The presence of a higher p-value above the 5% level of significance indicates that the random

effect model is more appropriate than the fixed effect model. Besides, we did the Breusch and Pagan Lagrangian Multiplier test for random effects to see which model better fits our data between the random effect and Ordinary Lease Square. After doing the analysis, the chi-square value of 260.49 was discovered, and the p-value (0.0000) was found to be statistically significant at 1%. The lower p-value of less than 1% unambiguously suggests that OLS is not the ideal model for our study. As a result, when compared to the competing models, random effect is the best acceptable model for the investigation or study.

Table 4
Random Effect Regression

Variables	Coefficient.	Standard Error	T-value	P-value
Cost of Equity	124.52	30.61	4.07	0.000
Cost of Debt	7.43	10.60	0.70	0.484
Real Earning Management	41.76	47.96	0.87	0.384
Accrual Earning Management	12.04	6.63	1.82	0.069
Voluntary Disclosure Quality	31.07	18.53	0.40	0.121
Leverage	-34.08	32.40	-1.05	0.293
Firm's Size	562.45	34.15	4.12	0.001
Return on Assets	461.92	16.45	5.09	0.021
Constant	613.08	278.34	2.20	0.028

Meanwhile, analysis of the independent members reveals a positive coefficient that is statistically significant at the 5% level of significance. This indicates that having a larger number of independent members on the audit committee has a tendency to persuade businesses to voluntary disclose quality information. Moreover, all the variables were insignificant related with cost of capital accept the proxy of equity. This shows that, it is better for a company to issue equity than debt, as the firm may be able to grow fast in the future.

Table 5
Moderation table
Models of Moderating Relationship with Weighted Average Cost of Capital

Variables	COE Model			COD Model		
	Coef.	*t-stat.*	*p. value*	*Coef.*	*t-stat.*	*p. value*
C	0.5162	0.2742	0.142	0.32883	0.42892	0.451
REM	0.5384	0.1111	0.000	0.0011	0.00072	0.216
ARM	0.9461	0.3254	0.003	-0.0017	0.00094	0.031
WACC	-0.104	0.0531	0.006	-0.0001	0.0002	0.152
REM*WACC	-0.011	0.0217	0.621	-0.0004	0.0008	0.352
AEM*WACC	0.056	0.0241	0.023	0.00013	0.00006	0.006
LEVERAGE	0.0002	0.0004	0.327	-0.0145	0.0471	0.041
FSIZ	0.0001	4.75e-0	0.021	-0.0146	0.0367	0.673
ROA	0.2341	2.3921	0.046	0.2132	0.0578	0.000
F-Statistics	18,287			13,585		
R-Squared	0.4503			0.3851		

From Table 5, the REM and COE of a firm in the analysis variables have a significant positive impact on its firm performance with a p-value (0.000), suggesting that larger firms have better resources to deal with financial distress thus enabling them to achieve better firm's performance. However, the moderation result, revealed that the coefficient of REM*WACC was (-0.011.) the coefficient indicates a negative between REM*WACC and COE. It implies the less the REM*WACC, the higher the COE and vice versa. Meaning that, a decrease in REM*WACC by one day is associated with a value (0.621) decrease in COE. Furthermore, the ARM and COE of a firm in the table have a significant positive impact on its firm performance with a p-value (0.003) the coefficient indicates a positive relationship between ARM*WACC and COE. This shows that the faster the company can issue equity to the public within the period the more the firm is expanding in achieving desire objectives. However, the WACC insignificantly moderates the relationship between ARM and COD. The regression result, which revealed that the coefficient of ARM*WACC was -0.0004. The coefficient indicates a negative between ARM*WACC and COD. It's indicates that the more the ARM*WACC, the higher the COD and vice versa. Meaning that, a decrease in ARM*I by one day is associated with a 0.0008 increase in COD. The negative relationship found between ARM*WACC and COD is statistically insignificant because the p-value (0.352) was greater than the 10% significance level.

Conclusion
The conclusion have ramifications for a variety of stakeholders, including investors, regulators, and Jordan market in Asia. The study's primary shortcoming was the process of voluntary disclosure quality. All risk disclosure studies, particularly the way information is gathered from annual report narratives, have an element of subjectivity. To mitigate potential bias, we use a manual approach that is the most difficult and time-demanding to implement, counting the relevant words using a decision rule derived from earlier research. Prior to analysis, it is necessary to consult a reference (checklist) to ensure that the risk sentence is appropriately tagged and documented. This strategy would mitigate the subjectivity that was

previously predicted. Further research might be conducted to determine the effect, if any, of board meetings and attendance on Real earning management. Second, we encountered a data shortage in the publicly traded enterprises in the country. As a result, we limited our sample to nonfinancial firms for which data was accessible. We encourage scholars to replicate the variables examined in this study in other jurisdictions, particularly those relating to intellectual capital, in order to determine whether they have an influence or not. Additionally, in light of the recent global pandemic of covid-19, which exposed numerous businesses to risks and uncertainties, future research should assess corporate reporting to determine whether firms' voluntary disclosure practices have changed the result in the post covid-19.

Theoretical and Contextual Contributions
The findings of this study have theoretical and contextual contribution. Precisely, it lend credence to the signally theory because it has provides further empirical evidence to prove the various assumptions of the theory. Firstly, the signally theory stipulates that the companies could gain investors' confidence and procure economic resources if they disclose more information in the financial reports (Birjandi et al., 2015). It enhances external parties' confidence in the company by reducing inconsistent information. This is because any concealment of information by managers may affect the relationship with stakeholders (such as investors and creditors) (Boshnak, 2017). To enhance the confidence between these parties, firms should preserve shareholders' trust by issuing financial reports that are complete, accurate and reliable to reduce information asymmetry and agency cost (Alzoubi, 2016). In addition, it is important to allow investors to discern the precise details of the company's position in terms of its risks and expected return (Hasan et. al., 2017). This leads to better decisions and optimal allocation of economic resources due to the presence of understandable, accurate and timely information. Furthermore, the results of objective one makes key contributions to the literature on earnings management in Jordan, as it highlights the importance of evaluating a large number of firms. Most of the studies conducted in Middle East have focused mostly on trading and services and manufacturing companies. While other studies undertaken in other sectors suffer from flaws such as small sample size or have a short span. Most of these studies also did not take care of multicollinearity and serial and auto correlation effects on their variables. Such neglect cast doubt on the reliability of their findings.

Arising from the above, the present study is the first study that examines the issue on a large scale which includes 99 firms and for a longer period of ten years, resulting into 990 firm-year observations. The data for this study were tested and appropriately corrected against errors that might lead to misspecification and misleading results, unlike the previous studies. It also highlights the role that specific variables play in promoting good earnings management practices that will improve firm's activities in Jordan. Thus, this study contributes to the existing literature by addressing the need to undertake a robust study worthy of being generalized.

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