

Financial Reporting Quality and cost of debt: Evidence from Family and Non-family Firms in Sultanate of Oman

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Abstract

The cost of debt provides signals not only concerning how the firms are financed but also pertaining to the ability of managers to increase the bottom line-income statement item. Thus, with good quality of financial reporting practice, firms are expected to experience the optimum level of the cost of debt. The aim of this study is to examine whether there is a relationship between financial reporting quality and cost of debt among family and non-family owned companies in the Sultanate of Oman. This study uses a panel dataset for 68 companies listed in Muscat Securities Market over the period from 2005 to 2011. The study contributes to the literature by extending the scope of previous studies concerning the cost of debt and financial reporting quality by considering the business environment in the Sultanate of Oman where family ownership and control are more common. Additionally, lending environment in Oman is very different from that in developed countries. For instance, in Oman banks are the dominant players in the financial sector and firms still overwhelmingly rely on banks to satisfy their capital needs. Furthermore, based on the difference between family and non-family owned firms with Type I and Type II agency problems, this study further contributes to the literature by examining the influence of financial reporting quality on the cost of debt, which is expected to be different for family and non-family firms. The empirical results indicate that the association between financial reporting quality and cost of debt is negative and significant for the full sample and non-family firms. However, this relationship is weak for family firms.

Keywords: Financial reporting quality cost of debt, family and non-family firms, Oman.

Introduction:

Cost of debt is considered an important issue for all companies for several reasons. Firstly, companies can manage their finance effectively when they obtain the best interest rate. Secondly, calculating the cost of debt as it applies to incurring more debt can assist companies to weigh the benefits of the potential action with the liabilities. Finally, properly evaluating the cost of debt will assist companies to effectively determine whether to issue a bond to finance upcoming projects (Warga and Welch, 1993). Moreover, as the cost of servicing the debt grows beyond the ability to pay due to external events (income loss) or internal difficulties (poor management of resources), the shareholders' wealth will be affected. In a more direct sense, more bankruptcies have occurred due to both increased cost of debt caused by deflation and reduced demand (Myers and Stewart, 1977).

Capital providers rely on financial reports to assess the extent of default risk. Existing financial reporting quality studies demonstrate that

companies with high-quality financial reporting can positively influence the lending decisions of creditors and lower the cost of debt financing (Ahmed et al., 2002; Zhang 2008). In particular, financial statements and accounting earnings are the most important single source of information to investors. Rational investors rely on reliable information about firms in their security pricing decisions. Therefore, accounting information has a central role in evaluating the performance of firms and eliminating information asymmetry (Healy, 1996; Leuz and Verrecchia, 2004; Bharath et al., 2008; Habib et al., 2019).

Previous literatures that empirically link financial reporting quality with the cost of debt use different measures of information quality as a proxy for financial reporting quality, such as disclosure score (Achek and Gallali, 2015), conservative accounting (Ahmed et al., 2002; Zhang, 2008), and accruals quality (Francis et al., 2005; Qi et al., 2010; Bauwhede et al., 2015). This study considers the quality of accounting earnings as a proxy for financial reporting quality. The proxies that generally utilised are accounting-based accruals quality developed by Dechow and Dichev (2002) and modified by Francis et al. (2005). Accruals quality is important indicator

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expresses investors about the mapping of accounting accruals into operating cash flows. Poorer accruals quality declines this mapping and therefore increases information risk. Francis et al. (2005) claim that cash flow is the fundamental component that investors price, which must be the basic premise when identifying accruals quality as the measure of information risk associated with earnings. Since the accruals quality is an accounting-based measure of earnings quality, it mostly reflects the information precision risk embedded in financial reporting.

Family firms constitute the most fundamental business form of organizational structure in both developed and developing countries. Several studies have identified the difference between these countries in holding family firms; for instance, using 27 countries from around the world, La Porta et al. (1999) find that family firms are the most common type of economic organization in these countries. In a study of 675 firms listed in 11 European countries, Barontini and Caprio (2006) find that the firms controlled by families account for 53 per cent of the sampled companies. In a study of 403 companies among the S&P 500 industries in the United States (US), Anderson and Reeb (2003) determine that more than one-third of these companies are family firms. Of 2,980 listed companies in nine countries in East Asia, Claesens et al. (2000) claim that companies controlled by families account for 66 per cent of the companies studied. In addition, of 304 listed companies in four Arab countries, Omran et al. (2008) find that the firms controlled by families account for 68 per cent of the sampled companies.

Although family-owned corporations have a considerable presence among publicly traded corporations, family-owned firms are different from non-family firms. According to the agency theory, family owners expend more effort to monitor managers than other types of large shareholder. This suggests that, compared to non-family companies, the Type I agency problem (manager-owner) may be less prevalent in family firms due to less information asymmetry existing among manager-owners (Anderson et al., 2004). However, the Type II agency problem is perceived to be more severe in family firms because family owners may have both the incentive and the ability to extract private benefits at the expense of minority shareholders, which is harmful to firm value (Cheung et al., 2006).

In addition, ownership and control in family

firms are not separated. In other words, family owned firms have both a large share of equity and executives in their companies. In non-family firms, ownership is dispersed among small shareholders and the monitoring role is concentrated among professional managers. Consequently, this difference has led to different styles of management, levels of motivation among the founders, family values and decision-making processes (Daily and Dollinger, 1992; Chua et al., 2003). Therefore, based on the difference between family and non-family owned firms with Type I and Type II agency problems, and the difference in ownership and control, the influence of the financial reporting quality on the cost of debt is expected to be different for family and non-family firms.

While there has been research examining financial reporting quality and cost of debt in other contexts (Ahmed et al., 2002; Francis et al., 2005; Zhang, 2008; Qi et al., 2010; Bauwhede et al., 2015; Achek and Gallali, 2015), there is however a general lack of research that investigate this issue within the Arab or Middle East context, particularly in the setting of the Sultanate of Oman, which is characterized by the absence of a well-developed bond market and a phenomenally high cost of borrowing by international standards (Rao et al., 2007). Furthermore, the financial markets in Oman, remain less developed, and the regulations and corporate control are still weak (Chahine and Tohme, 2009). In addition, firms in the Sultanate of Oman are characterized by high rates of private and individual ownership coupled with weak legal protection of minority shareholders (Bolbol et al., 2005). Within this weak regulatory framework, the influence of financial reporting quality on the cost of debt is expected to be different for family and non-family firms.

This study contributes to the literature by extending the scope of previous studies concerning the cost of debt by considering the business environment in the Sultanate of Oman where family ownership and control are more common. Additionally, lending environment in Oman is very different from that in developed countries. For instance, in Oman banks are the dominant players in the financial sector and firms still overwhelmingly rely on banks to satisfy their capital needs (Rao et al., 2007). Furthermore, in Sultanate of Oman capital market, financial reporting is the only reliable source of information available to investors (Alattar and Al-Khater, 2011). In addition, this study contributes to the literatures by using

accounting-based accruals quality as a proxy of financial reporting quality that are computed using model developed by Dechow and Dichev (2002) and modified by Francis et al. (2005). Finally, based on the difference between family and non-family owned firms with Type I and Type II agency problems, and the difference in ownership and control, this study further contributes to the literature by examining the influence of financial reporting quality on the cost of debt, which is expected to be different for family and non-family firms.

The selection sample of this study is based on balance panel dataset for companies listed on the Muscat Securities Market for the period 2005-2011. The findings of this study using random effect model reveal that there is a significant negative association between financial reporting quality for full sample and non-family firms. The result indicates that companies with higher financial reporting quality receive lower cost of debt. This finding supports that capital provider in Oman relies on reliable information in evaluating the performance of firms and eliminating information asymmetry to assess the extent of default risk. However, this relationship is weak for family firms.

Previous Literature and Development of Hypotheses:

Existing financial reporting quality studies show that companies with high quality financial reporting can positively influence the lending decisions of creditors and lower the cost of debt financing (Ahmed et al., 2002; Zhang, 2008; Bauwhede et al., 2015; Achek and Gallali, 2015). Poor quality reporting impairs the coordination between firms and their investors with respect to firm's capital investment decisions, thereby creates information risk. Anticipating this, investors demand a higher risk premium i.e., they charge a higher cost of capital (Leuz and Verrecchia, 2004; Habib et al., 2019). Several studies examine the effect of earning quality and cost of capital, for example Easley and O'Hara (2004) and Leuz and Verrecchia (2004). They predict that firms with more information risk will have higher cost of capital. Gray et al. (2011) in Australia find that higher accrual quality leads to lower cost of capital. In addition, Barth et al. (2013) based on US sample find that firms with more transparent earnings enjoy a lower cost of capital.

Some studies examine the influence of earning quality on the cost of equity (e.g. Francis et al., 2004; Gray et al., 2009; AbdulLatiff and Taib,

2011; Othman, 2010; Bhattacharya et al., 2012; Ben-Nasr and Al-Dakheel, 2014). Ben-Nasr and Al-Dakheel (2014) Using a multinational sample of firms privatized in developing and industrialized countries, find strong robust evidence that firms with lower earnings quality are penalized with a higher cost of equity. Bhattacharya et al. (2010) and Francis et al. (2004) in the US find that firms with lower earnings quality are penalized with a higher cost of equity. AbdulLatiff and Taib (2011) and Othman (2010) in Malaysia find that earnings quality measures (accrual quality, discretionary current and total accruals) as proxy to information quality are significantly reduce the cost of equity.

There is however a general lack of research linking earning quality with the cost of debt. For example, Francis et al. (2005) and Qi et al. (2010) reveal that firms in the US with poorer accruals quality receive higher ratio of interest expense than firms with higher accruals quality. In addition, Ahmed et al. (2002) and Zhang (2008) show that in the U.S. market, conservative accounting is an important characteristic of high quality financial reporting that can influence the lending decisions of creditors and lower the cost of debt financing. Bauwhede et al. (2015) examine the influence of financial reporting quality and cost of debt using a large and detailed dataset of financial statements of Belgian small and medium-sized enterprises (SMEs) over the period of 1997–2010. Using accruals quality as a proxy for the quality of SMEs' financial reports, they find that the quality of SMEs' financial statement is negatively related to those companies' effective interest cost. Achek and Gallali (2015) investigate the effect of earnings reporting lag on the cost of debt for the Tunisian setting. Their sample consists of 32 Tunisian companies for the period of 2003-2012. They use the timely disclosure as a proxy for earnings reporting lag. Their results show that the association between earnings announcement lag and the cost of debt is positive and significant.

In addition, the contrasting findings above ignore the influence of the institutional structure of companies and countries, such as ownership structure. For example, Bhojraj and Sengupta (2003), and Kosnick (1987) show that companies with concentrated family ownership could not obtain the optimum cost of debt even with high reporting quality. Several studies have shown a difference in firm performance between family and non-family firms (e.g. Anderson and Reeb,

2003; Villalonga and Amit, 2006; Miller et al., 2007; Chahine, 2007; Ibrahim and Abdul Samad, 2011; Ong and Gan, 2013; Zattoni et al., 2015). However, the empirical results for the performance between family and non-family owned firms are mixed. For example, Anderson and Reeb (2003), Villalonga and Amit, (2006) show that family firms perform better than non-family firms, while Miller et al. (2007) indicate that firms that are owned and controlled by families or employ relatives as managers never exhibit superior performance. A study by Chahine (2007) on the Gulf Cooperation Council (GCC) countries finds that private investor ownership business and personal relationships dominate the financial preferences, and, therefore, have a negative effect on bank value. By applying a dynamic trade-off model to a sample of Brazilian companies for 2003-2013, Kayo et al. (2018) show that family companies have higher leverage and slower adjustment speeds in comparison to non-family companies. Therefore, it is important to study family-owned firms because, compared to non-owned firms, they are common among public firms in both developed and developing countries.

This study attempts to extend these prior studies by examining whether there is any difference in the association between financial reporting quality and cost of debt between family and non-family owned companies in the Sultanate of Oman where family-based ownership control is widespread and the legal protection of minority shareholders is weak (Omran et al.,

2008). Within this weak regulatory framework, the controlling family can expropriate minority shareholders, which influence debt decision, and, consequently, the cost of such debt. Based on the above arguments and previous studies, this study expects that the influence of financial reporting quality on the cost of debt is weaker in family firms than in non-family firms.

Based on the above arguments and empirical evidence provided by the previous studies and based on the difference between family and non-family owned firms it is hypothesized that:

H₁: There is a negative relationship between financial reporting quality and the cost of debt for full sample.

H₂: There is a negative relationship between financial reporting quality and the cost of debt for non-family firms.

H₂: The relationship between financial reporting quality and cost of debt is weaker for family firms.

Methodology:

Sample:

This study considers a balance panel dataset⁽¹⁾ which has multiple observations on the same economic units. Each element has two subscripts, the group identifier *i* (68 non-financial firms publicly listed in the Muscat Securities Market) and within the group index denoted by *t* (7 years), which identifies time (2005-2011), the total number of observations are 476. The samples selected for the above-mentioned seven years from 2005 to 2011 are depicted in Table 1.

Table 1: Sample selection for each year 2005-2011

Sample Selection	Total cases
Total number of companies extracted from Muscat Securities Market in 2011	116
Less:	
Banks and financial companies	(31)
Companies with incomplete data	(6)
Companies with no loans	(11)
Sample	68

After eliminating 31 banks and financial related companies, 6 companies with incomplete data, and 11 companies with no loans, the initial sample for each year was reduced to 68 for 7 years (476 firm-year observations).

Proxies and Variable Definitions:

Cost of Debt:

The dependent variable of this study is the cost of debt, which is calculated as the interest expenses for the year divided by the average of the total short-term and long-term debt (Kim et al., 2009; Lorca et al., 2011; Piot et al., 2010; Pittman and

Fortin, 2004; Hashim and Aomrah, 2016).

Financial Reporting Quality:

The independent variable of this study is financial reporting quality, which is represented by accounting-based accruals quality. The variable is calculated using the following model:

Modified Dechow and Dichev (2002) model by Francis et al. (2005):

This model has recently been considered as a better proxy for financial reporting quality (Aboody et al., 2005; Biddle et al., 2009; Yoo et al., 2013). The measure is based on the

observation that accruals map into cash flow realizations and regardless of managerial intent, the accrual quality is affected by the measurement error in accruals. In Dechow and Dichev's (2002) approach, the estimated residuals from firm specific regressions of working capital accruals on past, present, and future cash flow from operation capture total accruals estimation error by management and are

$$\frac{\Delta TCA_{it}}{A_{it}} = \alpha_0 + \alpha_1 \frac{CFO_{it-1}}{A_{it}} + \alpha_2 \frac{CFO_{it}}{A_{it}} + \alpha_3 \frac{CFO_{it+1}}{A_{it}} + \alpha_4 \frac{\Delta REV_{it}}{A_{it}} + \alpha_5 \frac{PPE_{it}}{A_{it}} + \varepsilon_{it}$$

Where:

ΔTCA_{it} = Firms i total current accruals in year t = ($\Delta CA_{it} - \Delta CL_{it} - \Delta Cash_{it} + \Delta STD_{it} - Dep_{it}$).

ΔCA_{it} = Change in current assets between year t-1 and year t.

ΔCL_{it} = Change in current liabilities between year t-1 and year t.

$\Delta Cash_{it}$ = Change in cash and cash equivalents between year t-1 and year t.

ΔSTD_{it} = Change in debt included in current liabilities between year t-1 and year t.

Dep_{it} = Depreciation and amortization expense for firm i in year t.

A_{it} = Average total assets for firm i in year t and year t-1.

CFO_{it} = Net cash flow from operation activities for firm i in year t.

ΔREV_{it} = Change in revenue for firm i from year t-1 to year t.

PPE_{it} = Gross property, plant, and equipment for firm i in year t.

For the above mentioned model each firm-year, the equations is estimated cross-sectionally for all firms (minimum 10 firms within each industry groups⁽²⁾) using rolling 7-year windows. Accrual quality equal to the standard deviation of firm $_{it}$ estimated residuals. Larger standard deviations of residuals correspond to poorer accrual quality. Following DeFond et al. (2007) and Hashim and Devi (2007), in regression analysis the standard deviation score is multiplied by -1 so that higher score indicates higher earnings quality, therefore higher financial reporting quality.

Family control:

The definition of a family business is still subject to debate among researchers. For example, Anderson and Reeb (2003) define a family firm as either individuals or groups of founders or any close family relationship among the owners, directors or block holders. On the other hand, Maury (2006) describes family ownership as the degree of family presence on the board in addition to regarding to exerting dimensions of family power. Furthermore, Astrachan, Klein and Smyrnios (2002) define a family firm as consisting of three main dimensions – power, experience and culture of the family. However, Adams et al. (2009), and McConaughy et al. (1998) explain family owned firms on the basis of family control and voting rights. From the above definitions, this study defines family firms in the Sultanate of Oman as private institutions

viewed as an inverse measure of earnings quality. Francis et al. (2005) extend the Dechow and Dichev (2002) original accrual quality model by adding two additional variables, i.e. change in revenue and property, plant and equipment (PPE) for more complete characterization of the relation between accruals and cash flow. The following equation of accruals quality is adopted:

that take the name of a family as well as individuals that have the same family name or any close family relationship among the owners. Accordingly, family ownership in this study is measured as a percentage of shares owned by family shareholders who own 5%⁽³⁾ or more of a firm in respect of the total number of shares issued (Chahine, 2007; Al-Musalli and Ismail, 2012). Therefore, to separate between family and non-family firms, this study uses a dummy variable by assigning a value of one (1) for family firms if the major family shareholders own a stake of 5% or more of firm shares, and zero (0) otherwise for non-family firms.

Control Variables:

This study includes control variables that have been shown to have a significant impact on the borrowing cost (Anderson et al., 2003, 2004; Ballesta and Meca, 2011; Lorca et al., 2011). This study includes firm size as one of the main control variables measured by the natural logarithm of firms' total assets (Ghosh and Sirmans, 2005). Generally, larger firms have lower risk and are expected to have economies of scale in the cost of debt (Blackwell et al., 1998). Leverage is calculated as the percentage of firms' total debt to total assets for the differences in the financial structure of firms and to proxy default risk (Fields et al., 2010). Firms with greater debt intensity present higher risk to debt providers, and, thus, are expected to have a higher cost of debt. This study includes return on assets

measures by dividing firms' net profit to total assets as an indicator of a firm's financial performance (Haniffa and Huduib, 2006). Interest coverage rate is calculated as the ratio of operating profit over interest expense for the period as a proxy of default risk (Anderson et al., 2004) with lower interest coverage rate values reflect a greater risk of default. Following Lorca et al., (2011) this study uses Big4 proxy for auditor reputation and measure as dummy variable, a value of one when the firm has a Big four auditor and zero otherwise..

Panel Data Estimation:

This study employs panel data analysis to examine the influence of financial reporting quality on the cost of debt. Panel data analysis has been adopted by previous accounting studies (e.g., Banker et al., 2002; Bhattacharya et al., 2006; Ballesta and Meca, 2007; Ming and Gee, 2008; Leng, 2008). These studies approve the usefulness and power of this type of data analysis in terms of making the results applicable more generally and adding to the reliability of estimations. Panel data may have group effects, time effects, or both. These effects are either fixed or random. A fixed effects model assumes differences in intercepts across groups or time periods, whereas a random affects model explores differences in error variances. The main difference between the two

models is whether the unobserved effects (the error term) are correlated with included independent variables (Wooldridge, 2003). For a given observation, an intercept varying over units results in the structure:

$$COD_{it} = a_0 + \beta_1FRQ_{it} + \beta_2FS_{it} + \beta_3LEV_{it} + \beta_4ROA_{it} + \beta_5Big4_{it} + \beta_6ICR_{it} + (u_i + \epsilon_{it})$$

Where: i represent company, t time period, COD is cost of debt, FRQ is financial reporting quality, FS is firm size, LEV is leverage, ROA is return on assets, Big4 is auditor reputation, ICR is interest coverage rate, u_i is the individual-level effect, and ϵ is the disturbance term. The u_i are either correlated or uncorrelated with predictor variables. The u_i are always assumed to be uncorrelated with ϵ_{it} . If the u_i are uncorrelated with the predictor variables, it is known as the random effects model, but if the u_i are correlated with the predictor variables, it is known as the fixed effects model. The Hausman test is used to differentiate between the fixed effects model and the random effects model. This test uses the difference between the two estimated covariance matrices (which is not guaranteed to be positively definite) to weigh the difference between the fixed effects model and the random effects model vectors of slope coefficients.

Results and Discussion:

Table 2: Descriptive Statistics for Full Sample, Family, and Non-Family Firms

Variables	Full Sample (Firms=68) (N=476)				Family (Firms=41) (N=287)	Non-Family (Firms=27) (N=189)	t-statistics of Mean Difference
	Mean	Std D	Min	Max	Mean	Mean	
COD	0.062	0.022	0.012	0.129	0.064	0.060	2.041*
FRQ	-0.639	0.631	-3.837	-0.011	-0.6780	-0.5840	-3.389*
FS	7.102	0.601	5.440	8.850	6.992	7.269	-5.059*
LEV	0.546	0.250	0.050	1.090	0.565	0.519	1.981*
ROA	0.042	0.088	-0.290	0.300	0.025	0.069	-5.530*
BIG4	0.601	0.490	0.000	1.000	0.547	0.683	-2.975*
ICR	12.13	24.37	-61.11	102.1	7.687	18.885	-5.027*

COD (Cost of Debt) = Interest expenses for the year divided by the average of short-term and long-term debt. **FRQ** (Financial Reporting Quality) = FRQ (Financial reporting quality) = Absolute value of standard deviation of firm residuals, from years t-6 to t from annual cross-sectional estimations of the Francis et al. (2005) model, multiplied by -1. **FS** (Firm Size) = Natural logarithm of total assets. **LEV** (Leverage) = Percentage of total debt to total assets. **ROA** (Return on Assets) = Percentage of the net profit to total assets. **BIG4** (Auditor Reputation) = A value of one (1) for firms with big four audit firm as the auditor, and zero (0) otherwise. **ICR** (Interest Coverage Rate) = The ratio of operating profit over interest expense for the period. * Significant at 0.01 level

Table 2 presents the descriptive statistics for the full and separate sample for family and non-family firms in the Sultanate of Oman. It reports the values of the means and the t-statistics that

test the differences between the means of these variables for family and non-family firms. The descriptive statistics show a mean value of the cost of debt for the full sample of 6.2 per cent

with a minimum of 1.2 and a maximum of 12.9 per cent, while the mean value of the cost of debt for family and non-family are 6.4 per cent and 6 per cent, respectively. The results show that the cost of debt is statistically significantly different between family and non-family firms. This indicates that the cost of debt in family firms is higher compared to non-family firms. The descriptive statistics also show that the average value of financial reporting quality for the full sample is -0.639 with a minimum of -3.837 and a maximum of -0.011, while the mean value for financial reporting quality for family firms is -0.6780 and -0.5840 for non-family firms. In addition, the t-statistics for the mean differences between family and non-family firms is also significant. These results show that the financial reporting quality for family firms is less than for non-family firms. Additionally, the mean value of the firm size for the full sample is 7.1 with a minimum of 5.44 and a maximum of 8.85, while the mean values for family and non-family firms are 6.99 and 7.29, respectively. This indicates that the firm size (measured as total assets) in family firms is smaller than in non-family firms. Moreover, the average value of leverage (the proportion of total debt to total assets) for the full sample is 54.6 per cent with a minimum of five and a maximum of 109 per cent, while the

leverage ratios for family and non-family are 56.5 per cent and 51.9 per cent, respectively. The results show that the family firms use more debt than non-family firms. However, the descriptive statistics for firm performance (measured as return on assets) for the full sample 4.2 per cent with a minimum of -29 per cent and a maximum of 30 per cent, while the mean values for the family and non-family sample are 2.5 per cent and 6.9 per cent, respectively. The results for the t-statistics of the mean differences for firm performance between family and non-family are significant, which indicates that firm performance in family firms is less than for non-family firms. The mean values for the auditor type (Big4) for family and non-family firms are 54.7 per cent and 68.3 per cent. This indicates that family firms have a lower demand for high quality audit services compared to non-family firms. The average value of the interest coverage rate of the full sample is 12.13 per cent with a minimum of -61.11 and a maximum of 102 per cent, while the average values for family and non-family firms are 7.68 per cent and 18.88 per cent, respectively. Hence, the interest coverage rate in family firms is lower than that for non-family firms.

Regression Results:

Table 3: Random Effects Model for Full Sample, Family, and Non-Family Firms

Variables	Full sample (Firms= 68)		Family (Firms= 41)		Non-family (Firms= 27)	
	Coeff.	t-Stat.	Coeff.	t-Stat.	Coeff.	t-Stat.
FRQ	-.0046	-3.85***	-.0031	-2.15*	-.0060	-2.84***
FS	-.0011	-0.38	.0021	0.59	-.0057	-1.26
LEV	-.0044	-0.78	-.0036	-0.50	-.0095	-1.06
ROA	.0037	0.27	-.0176	-1.05	.0289	1.16
BIG4	-.0086	-3.76***	-.0127	-4.43***	-.0017	-0.44
ICR	-.0001	-2.47**	-.0000	-0.23	-.0002	-3.31***
Constant	.0768	3.69***	.0562	2.18**	.1086	3.27***
Hausman test		10.21				
R ²	0.136		0.11		0.29	
N	476		287		189	

***, ** and * indicate significant at 1%, 5% and 10%, respectively. Refer to Table 2 for description.

As shown in Table 3, the result of the Hausman test is > 0.05 (i.e. not significant). This test indicates that the random effects model is preferred. Based on the random effects model, the results reveal that the financial reporting quality for the full sample is significant (at p-value < 0.01) in the predicted negative direction,

as shown by the estimated coefficient. This indicates a strong association between financial reporting quality and the cost of debt. The result further indicates that the financial reporting quality has a degree of importance in the cost of debt referring to the unique contribution of the quality of financial reporting in explaining the

cost of debt in the Sultanate of Oman. This suggests that the accounting information has a central role in evaluating the performance of firms and eliminating information asymmetry. Therefore, the outside investors (i.e., shareholders and debt holders) are expected to discount the future firm value at a lower rate of return. The results of this study also support previous studies by Francis et al. (2005), Qi et al. (2010) and Bauwhede et al. (2015) who find that companies with higher earning quality receive lower cost of debt. To support the results in the full sample regression, this study divides the full sample into two groups – family and non-family – to examine whether there is any difference in the influence of financial reporting quality on the cost of debt among family and non-family owned companies in the Sultanate of Oman. The result indicates that there is a negative significant relationship between financial reporting quality and the cost of debt for the non-family firms. This relationship, however, is weak for family firms.

Among the control variables, the relationship between firm size and cost of debt based on the full, family and non-family samples is not significant. Similarly, the effect of leverage on the cost of debt for the full sample and the separate samples of family and non-family is not statistically significant. However, although the effect of performance on the non-family firms is positive and significant, there is no significant effect for the full and family samples. In respect of auditor quality (Big4), the results indicate that the relationship between the Big4 and the cost of debt for the full and family firm samples is significant in the predicted negative direction, while this relationship is not statistically significant for the non-family sample. Finally, the relationship between the interest coverage rate and cost of debt for the full and non-family

firm samples is negative and statistically significant, whereas this relationship is not significant for family firms.

Conclusion:

The objective of this study is to determine whether there is any difference in the relationship between financial reporting quality and cost of debt among the family and non-family owned companies in the Sultanate of Oman. This study implements balance panel dataset for companies listed on the Muscat Securities Market over the period 2005 through 2011. The empirical results of this study show that companies with higher financial reporting quality receive lower cost of debt for full sample and non-family firms. However, this relationship is become weak for family firms. Findings of this study have potential implications to all financial reporting users (e.g. regulators and policy makers, investors, creditors, auditors, and researchers) by providing evidence that the level of financial reporting quality has a central role in evaluating the performance of firms and eliminating information asymmetry. Nevertheless, this study has some limitations. First, this study only focuses on accruals quality measurement as proxy of financial reporting quality, which applies the modified Dechow and Dichev (2002) accrual quality model by Francis et al. (2005). Other information quality measures as proxies of financial reporting quality, such as disclosure score and conservative accounting were not examined. Finally, the quality of the results can be judged based on the quality of the sample data. Our sample is based on the Muscat Securities Market listed companies and also focuses only on non-financial companies. Other non-listed companies and financial companies were not included. Future research should extend this research in several ways, in addition to overcoming its limitations.

Foot notes:

- (1) Balance panel data allows an observation of the same unit (e.g., individual, company, person, etc.) in every time period (e.g., year, month, etc.), which reduces the noise introduced by unit (individual, etc.) heterogeneity.
- (2) In the Sultanate of Oman, there are two industry groups - Industrial and Services.
- (3) The 5% cut-off is used because the majority of the listed companies in the Sultanate of Oman only disclose the ownership of the major shareholders who own 5% or above of the firm's total equity.

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جودة التقارير المالية، الملكية العائلية، وتكاليف الديون: الشركات في سلطنة عمان نموذجاً

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المخلص

تقدم تكلفة الديون إشارات ليس فقط فيما يتعلق بكيفية تمويل الشركات ، ولكن تتعلق أيضاً بقدرة المديرين في زيادة بنود بيان الدخل النهائي. ومع وجود نوعية جيدة من ممارسات إعداد التقارير المالية ، فإنه من المتوقع أن تحصل الشركات على المستوى الأمثل لتكلفة الديون. إن الهدف من هذه الدراسة هو فحص ما إذا كانت هناك علاقة بين جودة التقارير المالية وتكلفة الديون في ظل الملكية العائلية وغير العائلية للشركات في سلطنة عمان. تستخدم هذه الدراسة مجموعة بيانات لعدد 68 شركة مدرجة في سوق مسقط للأوراق المالية خلال الفترة من 2005 إلى 2011. تسهم أدبيات الدراسة في توسيع نطاق الدراسات السابقة المتعلقة بتكلفة الديون وجودة التقارير المالية ، وذلك بالنظر في بيئة الأعمال في سلطنة عمان من حيث إن ملكية العائلة للشركات والسيطرة عليها أكثر شيوعاً. بالإضافة إلى ذلك، فإن بيئة الإقراض في سلطنة عمان مختلفة تماماً عن تلك الموجودة في البلدان المتقدمة. على سبيل المثال نجد أن البنوك العمانية هي الجهات المسيطرة في القطاع المالي ولا تزال الشركات تعتمد بشكل كبير على تلك البنوك لتلبية احتياجاتها من التمويل. علاوة على ذلك، واستناداً إلى الفرق بين الملكية العائلية وغير العائلية للشركات التي تعاني عادة من مشاكل الوكالة من النوع الأول والنوع الثاني، تسهم هذه الدراسة أيضاً في الأدبيات من خلال فحص تأثير جودة التقارير المالية في التكلفة والتي من المتوقع أن تكون مختلفة للشركات ذات الملكية العائلية وغير العائلية. تشير نتائج التحليل الإحصائي إلى أن تأثير العلاقة بين جودة التقارير المالية وتكلفة الديون هو تأثير سلبي ومهم بالنسبة للعينة الكاملة ، وكذا عينة الشركات ذات الملكية غير العائلية. ومع ذلك، فإن هذه العلاقة كانت ضعيفة بالنسبة لعينة الشركات ذات الملكية العائلية.