IMPACT OF FIRM SIZE, FIRM AGE AND FAMILY CONTROL ON ACCRUAL EARNINGS MANAGEMENT: EVIDENCE FROM JORDAN

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ABSTRACT

This study sought to determine the impact of family control, firm size and firm age on the accrual earnings management among the Jordanian firms. Data was collected from 42 manufacturing companies listed in Amman stock market for the period 2013-2018. Analysis of data was then performed using two statistical tools of SPSS, linear regression and descriptive statistics. Results revealed that based on the modified Jones model of 1995, there is a flexible accruals earnings management among the Jordanian firms listed in Amman Stock Market. Most of the firms are non-family controlled. Moreover, accruals earnings management has a statistically significant negative association with firm size ($t=-4.202$, $p<.001$). However, firm age ($t=1.103$, $p=.271$) and family control ($t=.518$, $p=.605$) had no statistically significant association with accrual earnings management. This study confirms that the implication of firm size on accruals earnings management based on data extracted from the Jordanian firms listed on Amman stock market for the period 2013-2018.

Keywords: Accruals Earnings Management, Family Control, Firm Size, Firm Age.

INTRODUCTION

Audit quality became an attractive and captivating topic to many economic researchers after the shocking accounting scandals in many international companies including Enron and WorldCom (Giroux, 2008; Reber & Gower, 2006). Currently, earnings management has becomes a critical aspect of consideration in the corporate world, and both local and international auditors have become keen on the same. In Jordan, however, little has been investigated despite the evidence of earnings management in many firms within the region.

Earnings management is the asymmetric representation of the firm's financial information from the viewpoint of investors and the management (Susanto, 2013). Debnath (2017) gives a more explicit definition of earnings management as a "financial reporting phenomenon, which occurs when managers use their personal judgment in financial reporting and in assembling transactions to alter financial reports either to misinform some investors about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting outcomes". As such, earnings management seem to be an element that emerges from the management docket.

The intentions and purpose of earnings management with the manager' interests (Banimahd & Aliabadi, 2013). The managers can decide to lower or increase profits on books reporting, depending on the firms' earnings, just to attract incentives and investors (Maranjory et al., 2013). Other researchers including Jones (2011) have indicated that the management's decision to deflate actual profits on accounting records help them evade taxes. Nevertheless, earnings management directly alters the firm's financial records and cash flow activities, which are always vital baseline information to investors, creditor and the business owners (Bataineh, Abuaddous & Alabood,

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2018). As such, there is an intricate relationship between firm's financial reporting to future progress and performance.

The activity of earnings management is apparent in many parts of the globe. Recent investigation in Jordan is confirmed the influence of family factors in the earnings management (Bataineh, Abuaddous & Alabood, 2018). Many other researchers have also addressed various other factors that affect earnings management, and the outcome is unpredictable. In this line, corporate governance mechanisms have been highly implicated in earnings management (González & García-Meca, 2014; Patrick, Paulinus & Nympha, 2015). Factors like firm size, number of board members, industrial and managerial ownership have been mentioned to inject significant impact too (Susanto, 2013). Nevertheless, factors around earnings management seem to be dynamic and hence the need for more investigation.

Based on such exposition, this research aimed at examining the impact of the firm size, firm age and family control on accruals earnings management by analyzing the panel data from the listed manufacturing firms on Amman stock exchange 2013-2018. The study thus sought to confirm the following hypotheses:

- There is no significant relationship between Firms size and earning management
- There is no significant relationship between Firms age and earning management
- There is no significant relationship between family control and earning management.

Theory and Empirical Evidence

The amount of research that already sought to examine various aspect of accruals earnings management is evidently voluminous. From the earlier times when massive accounting scandal hit the three reputable US companies, Xerox, Enron and WorldCom among the several well-performing firms across the globe, researchers, as well as established auditors have shown extreme interests in examining audit quality. Whereas different countries have their internal financial reporting guidelines, the establishment of the International Financial Reporting System (IFRS) has brought in a more accurate financial reporting structure (Iatridis & Rouvolis, 2010; Madawaki, 2012; Aubert & Grudnitski, 2011).

The establishment of Amman Financial Market (AFM) in Jordan by the Central Bank, 1976 was expected to control the issuance of the public trading shares, and was monitored through transparent lens. As such, the over 250 listed companies (2020) are expected to provide accurate information regarding their financial performance (AL-Qatamin & Salleh (2020). Through the same lens, the firms' cash flow activities and accrual financial management get assessed.

Earnings Management

The Jordanian forms' financial reports are supposed to follow the Jordanian Association of Certified Public Accountants' guidelines (Al-Farah, Abbadi & Al Shaar, 2015). Also, the Auditing Profession Law of 1985 provides for professional accounting and audit practices in Jordan, which have not successfully halted the unwarranted discrepancies among Jordanian firms' financial reporting (Alhadab, 2018; Alzoubi, 2018; Banimahd & Aliabadi, 2013). The unceasing practice of questionable audit quality among the Jordanian firm intrigued the research investigation into the theory and empirics behind the same concept.

Earnings management presented by (Discretionary accruals) is widespread in Jordan (Alzoubi, 2016; Abbadi, Hijazi & Al-Rahahleh, 2016; Alhmood, Shaari & Al-dhamari, 2020). A critical observation is reported by Alhadab (2018) who examined whether the Jordanian Initial Public Offering (IPO) firms utilize real activities and accruals earnings management. Accordingly,

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the researchers noted that "IPO firms in Jordan utilize real activities and accruals accounting to inflate net income".

The same approach is evident in other countries. For example, a study conducted by Zang (2012) in China to assess whether managers utilize real activities manipulation or resort to accrual-based earnings management, and reported that the real activity manipulation and accrual-based earnings management alternate based on the relative costs. As such, the management decisively settle on the stage to impose the financial manipulation. Zang (2012) therefore justify the need to include both the approaches of earnings management for a comprehensive assessment of the firm's financial status. However, evidence from other researchers show that the large firms majorly concentrate on discretionary accruals earnings management (Bekiris & Doukakis, 2011; Jackson, 2018; Gerayli, Yanesari & Ma'atoofi, 2011).

Another significant observation in Jordan is reported by Al-Fayoumi, Abuzayed & Alexander, (2010) who examined the discretionary accrual earnings management as a function of the firms' ownership structure in Jordan. The researchers reported that the attempt by the institutions and block-holders to supervise the management's practice of discretionary accrual earnings management bears no significance. As such, the Jordanian management structures have adopted an elusive and opportunistic approach to earnings management.

Factors Around Earnings Management

Among the many factors, corporate governance mechanisms are the most highly implicated in accruals earnings management as they determine the nature of internal audit activities financial reports (Abbadi, Hijazi & Al-Rahahleh, 2016). A study conducted by Susanto (2013) among Indonesian firms reported that accruals earnings management is affected by the firms' audit committee, independent commissioner, and firms leverage have a significant influence on the likelihood of the management to indulge in discretionary accruals earnings management.

Another close concept is the influence of CEO characteristics on real activities earnings management as evaluated by Alhmood, Shaari & Al-dhamari, (2020). The researchers observed that real activities earnings management is accelerated by the CEO's political connection and experience. However, CEO's duality had a negative effect on the real activities earnings management. On the same point, Yu, et al., (2010) showed reported that female executive managers practice income-decreasing discretionary accrual, and are thus associated with a conservative earnings management.

Most importantly, firm characteristics have been examined as some of the factors with high potential impact on accrual earnings management. Debnath (2017) examined five different firm characteristics as potential influencers of the accrual earnings management among non-financial firms in India. Accordingly, the researcher employed Jones model of discretionary earning management, and reported a positive correlation between discretionary accruals and firm's growth and age. However, the study noted that firm's performance, risk factors and size negatively correlate with the firms' discretionary earning management.

The empirical evidence from Ali, et al., (2015) also showed that firm size has a positive and significant impact on earnings management measured through discretionary accruals in Pakistan. According to Barton & Simko, (2002), large firms have the tendency to modify their earnings records to evade criticisms from financial analysts, and also to earn investors' confidence. While many researchers have confirmed the significant impact of firm's size on earnings management (Uwuigbe, Uwuigbe & Okorie, 2015; Swastika, 2013) quantitative study conducted by Bassiouny (2016) in Egypt reported no significant association between earnings management and firm size.

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Family control has also been examined as one of the factors with potential impact on accruals earnings management practices. Classic investigation was conducted by Bataineh, Abuaddous & Alabood, (2018) among 43 selected industrial firms listed in the Amman Stock Exchange. The researchers reported a significant positive association between family ownership and earnings management. The same observation was made by Achleitner, et al., (2014) who surveyed family-owned German firms by utilizing socio-emotional theory. It is thus evident that family control could inject significant influence on earnings management.

METHODS

This study utilized the principles of quantitative descriptive design to determine the significant impact of firm size, firm age and family control on accruals earnings management among the Jordanian firms listed in the Amman Stock Exchange for the period 2013-2018. Accordingly, data was collected from 42 firms of diverse sub-industrial units including mining and extraction, chemical industries, food and beverage, electrical, textiles, as well as pharmaceutical and medical industries. However, financial firms were excluded since they operate on different budget makeups (Davidson, Goodwin-Stewart & Kent, 2005).

Four variables were examined;

- Earnings management: the discretionary accruals as provided by the modified Jones mode of 1995 was used to estimate earnings management.
- Family control: family control was determined based on the percentage of total shares of the capital owned, which is at least 20%. As such, the selected firms were either family-controlled or not, and hence treated as nominal variable.
- Firm size: firm size was taken as a measure of capital and asset owned. Specifically, log assets were used to determine the firms' sizes.
- Firm age: age of the firm was taken a scale variable with 'continuous' characteristic.

Discretionary accrual was determined as follows (modified Jones model of 1995):

DACCit = TACCit - NDACCit

Where:

$$\mathrm{TACC_{it}} = \text{ Total accruals in year }_{\mathrm{t}}$$
$$\mathrm{NDACC_{it}} = \text{ Non} - \text{discretionary accruals }_{\mathrm{t}}$$

The collected data was thus analyzed using the statistical tools of SPSS, version 22. The regression equation model was used to examine any statistically significant association between accruals earnings management and three independent variables (firm size, firm age, and family control).

$$\mathrm{DACC_{it}} = \mathrm{B_0} + \mathrm{B_1Fs_{it}} + \mathrm{B_2Fa_{it}} + \mathrm{B_3Fc_{it}}$$

Where:

$\mathrm{B_0}$: The intercept

$\mathrm{B_1} - \mathrm{B_3}$: The coefficient of the variables' association

$\mathrm{Fs_{it}}$: Firm size at time t

$\mathrm{Fa_{it}}$: Firm age at time t

$\mathrm{Fmc_{it}}$: Family control at time t

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RESULTS AND DISCUSSION

The statistical outcomes from this investigation showed many significant elements regarding accruals earnings management among the Jordanian firms listed in Amman Stock Exchange for the period 2013-2018.

Table 1 confirms that the average duration of operation for the Jordanian firms listed in Amman Stock Exchange is 27 years. The latest firm(s) to enter the market stayed in the ASE for 5 years, while the earliest firm(s) has been listed in ASE for 67 years. Regarding the firm size, the log assets show that the listed firms have an average log asset valued at 7.40, with the largest having 9.16 and the youngest having 5.64. The magnitude of absolute value resenting the discretionary accrual is also estimated at an average of 0.0839 (SD=.0.089). This outcome gives an idea of the flexible manipulations of accrual earnings management among the Jordanian listed firms in ASE.

Table 1
DESCRIPTIVE STATISTICS OF FIRM AGE, FIRM SIZE AND DISCRETIONARY ACCRUALS

	Minimum	Maximum	Mean	Standard Deviation
Firm age	5	67	27.52	16.128
Firm size	5.646739	9.16931	7.40892421	0.609762189
Discretionary accruals EM	0.000355	0.763718	0.08391309	0.089389202

Source: Author

Table 2 confirms that out of the 42 sampled firms from the Amman Stock Exchange for the period 2013-2018, only 27.7% (n=70)were under the family control and management. Majority, 73% (n=182) do no not have family control. Across the years, 2013-2018, two months 2017 and 2018 recorded a slight decrease in the number of firms with family control.

Table 2
FIRMS WITH FAMILY CONTROL IN AMMAN STOCK EXCHANGE (2013-2018)

	Family control	No family control	Total
2013	12	30	42
2014	12	30	42
2015	12	30	42
2016	12	30	42
2017	11	31	42
2018	11	31	42
Total	70 (27.7%)	182 (72.3%)	252 (100%)

Source: Author

Linear regression analysis was performed to examine any significant impact of family control, firm size and firm age on the accruals earnings management. With the standard error variate of 0.5%, the association is described in Table 3, Table 4 and Table 5.

From Table 3, the R^2 value indicates a 7.8% of the variance in this analysis is upheld by the independent variables (family control, firm size and firm age). Despite the low predication accuracy, significant outcome is recorded in Table 5.

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Table 3 SUMMARY OF MULTIPLE REGRESSION ANALYSIS BETWEEN ACCRUALS EARNINGS MANAGEMENT AND THE FAMILY CONTROL, FIRM AGE, AND FIRM SIZE (95% CI).				
	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.280[a]	0.078	0.067	. 086336838
Source: Author				

Table 4 displays the ANOVA table summarizing the regression model and the impact of family control, firm size and firm age on the discretionary accruals earnings management of the listed firms. There is a statistically significant variance on discretionary accruals earnings management (F=7.02, p<.001).

Table 4 ANOVA SUMMARY OF THE REGRESSION ANALYSIS					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	0.157	3	0.052	7.021	.000[b]
Residual	1.849	248	0.007		
Total	2.006	251			
Source: Author					

Table 5 gives the coefficients of the association between the three predictor variables and discretionary accruals earnings management. Firm size has as a statistically significant negative impact on accruals earnings management (t=-4.202, p<.001). Therefore, this study only rejects the first objective, which stated that there is no significant relationship between firm size and earning management. The other factors, firm age (t=1.103, p=.271) and family control (t=.518, p=. 605) do have any statistically significant impact on accruals earnings management and hence the second and third hypotheses are accepted.

Table 5 REGRESSION COEFFICIENT					
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	0.365	0.01		4.951	0
Firm size	-0.04	0.013	-0.273	-4.202	0
Family Control	0.007	0	0.034	0.518	0.605
Firm Age	0	0.01	0.069	1.103	0.271
Source: Author					

Firm size has a statistically significant negative association with the accruals earnings management (*t=-4.202, p<.001*). As such, larger firms are less likely to indulge in the practice of earnings management. This outcomes is consistent with the repot established by some previous researchers by Ahmad, Anjum & Azeem (2014) who noted that larger firms are more likely to have strong audit system as well as international auditors, thereby limiting the manger's ability to resort to earnings management. Several other scholars have confirmed this negative relationship between firm size and accruals earnings management (Persons, 1995). At the same time, the study conducted by Uwuigbe, Uwuigbe & Okorie, (2015) reported the positive association who reason that large

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firms struggle to maintain their reputation, and hence the need to have appealing financial reports to the investors and creditors.

At the same time, this study confirmed that age of the firm does not influence the manager's discretionary accruals earnings management. This outcomes is consistent with the observation made by some previous researchers who noted that firm age does not modulate the managers' decisions to alter the accruals earnings (Bassiouny, 2016; Debnath, 2017). Family control did not have any statistically significant association with accruals earnings management. This is consistent with Achleitner, et al., (2017), who noted that family firms are less likely to engage in accruals earnings management as a way of evade future audit complications.

CONCLUSION

This study examined the association between firm characteristics, family control, firm age and firm size on accruals earnings management. Accordingly, the outcome confirmed that firm size has an inverse relationship with the managerial decisions to practice opportunistic accrual earnings management. This relationship is attributed to the stronger internal audit control measures in the large firms than in the smaller firms. However, family control and firm age did not produce any statistically significant association with the accruals earnings management. Excitingly, most of the Jordanian firms listed in the Amman Stock Exchange for the selected period, 2013-2018 are non-family controlled. Nevertheless earnings management is apparent among the listed Jordanian firms.

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