



The Effect of Integrating Reporting on Earnings Quality: A Study of Family Firms in Indonesia

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ABSTRACT

Objective – The implementation of integrated reporting (IR), which is a composite of financial and non-financial information, in one single report makes financial reporting more comprehensive and more transparent. Transparent information in IR gives annual reporting of family firms a higher earnings quality.

Methodology/Technique – This research aims to examine the effect of IR on earnings quality of family firms in the mining industry on the Indonesian Stock Exchange between 2014 and 2017.

Findings – The results of this study indicate that there is a positive and significant relationship between integrating reporting and earnings quality. These results confirm that firms that use integrated reporting tend to show higher earnings quality. The study also finds that larger sized companies and larger leverage amounts equals a higher volume of information disclosed.

Novelty – The motivation of this research is to examine IR issues that are relatively new.

Type of Paper: Empirical.

Keywords: Earnings Quality; Family Firms; Financial Reporting; Indonesia; Integrated Reporting.

JEL Classification: M40, M41, M49.

1. Introduction

Sofian and Dumitru (2017) state that investors lost their trust in traditional reporting following the last global financial crisis. Financial reporting aims to present the real situation of current and future corporate performance however, it seems to fail to illustrate the economic consequences of businesses at the right time (Healy and Palepu, 2001).

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Some studies conducted in the finance area demonstrate that current financial reporting provides a limited historical perspective on a company's financial performance and does not provide sufficient support in the decision-making process (Krzus, 2011). Sofian and Dumitru (2017) state that investors want more integrated information that they can trust, which is linked to their business model, the company's value creation process and risk management (Sofian and Dumitru, 2017).

The International IR Council (IIRC, 2011) published the International IR Framework (IIRF), which is a conceptual framework of IR, in December 2013. IR involves reporting information, both financial and non-financial ESG in one single report, and aims to improve the quality of annual reporting and to present more specific financial information about the current and future prospects of a company (de Villiers, et al., 2017).

This research is important because research related to IR is still in its infancy, as the International IR Framework (IIRF) was only published in December 2013 (de Villiers, et al., 2014; Velte and Stawinoga, 2016). Integrated reporting has a higher quality of information for stakeholders because it presents financial and non-financial disclosures in one single report, however, this category of reporting is still voluntary. Therefore, more research is needed to support the benefits of integrated reporting so that it may become mandatory.

Most companies around the world are family firms (Soler, et al., 2017). Public companies in Indonesia are mostly family companies (OECD, 2015). In the last few decades, interest in family firms has increased. Some studies state that family companies in Indonesia tend to engage in opportunistic earnings management, which results in a lower earnings quality. Several other studies state that family companies tend to do efficient earnings management, which results in a higher earnings quality (Siregar dan Utama, 2008). Kazemian and Sanusi (2015) state that ownership structure is negatively related to earnings management, in other words, family companies will have low earnings management and high earnings quality.

Francis et al., (2008) state that earnings quality is influenced by corporate disclosure decisions. Francis et al., (2008) further state that disclosure is a proxy for earnings quality, meaning that if high disclosures can be presented in the form of integrated reporting, the earnings quality of a company is also high. Companies with a high level of disclosure will also have high earnings quality. Transparent information in IR makes annual reporting a high earnings quality, as IR is a form of complete and comprehensive reporting, so as to reflect the real condition of the company. Most researchers believe that family firms have lower earnings management practices (higher earnings quality) than non-family firms (Wang, 2006; Achleitner, et al., 2014). On the other hand, some studies reveal opposite results (Chi, et al., 2015).

Full disclosure by the company through IR shows that the company is transparent and has credibility in its reporting. This has an effect on company earnings quality, as firms that report IR have integrated, complete, and comprehensive reports, so as to reflect the real state of the company. Based on the stewardship theory, family companies want to maintain their reputation for future generations. Therefore, family companies will present disclosures to reduce information asymmetry, namely, complete and transparent disclosure. Integrated reporting will increase transparency of family firm reporting, reduce information asymmetry and reduce the risk and cause of lower capital costs. Reinforced by stewardship perspectives, family firms that implement IR should also produce higher quality earnings i.e. earnings that can reflect the real state of the company without being manipulated or without earnings management.

2. Literature Review

The research agenda related to IR based on the level of analysis can be grouped into two categories: research related to the implementation of IR (IR process) and research related to the quality of IR (IR quality). Research on the IR process investigates the difficulties, benefits and issues related to the implementation of IR within a company. Meanwhile, research related to IR quality investigates the quality of IR disclosed by the company, for example, how broad the disclosure is in relation to the six elements of capital in IR (financial capital, human capital, social and relationship capital, intellectual capital and natural capital). As IR is still in the early stages of implementation and remains a voluntary disclosure, research

related to IR quality can only be conducted on capital markets that require companies to carry out IR disclosure as their annual method of reporting, such as Johannesburg's capital market in South Africa, which is a pioneer in the disclosure of IR. Research on IR processes is therefore appropriate to the current situation and condition of IR. The gap in research on IR according to de Villiers (2016) requires further examination. Furthermore, de Villiers (2017) also identifies the need for a study to answer questions related to the relevance value of IR.

Family firms are more likely to experience agency problems. Having been aware of the information within the company through their daily activities, the management of family firms may be reluctant to present IR to other stakeholders. Siregar and Utama (2018) state that ownership structure greatly influences likelihood that family firms will engage in efficient earnings management rather than opportunistic earnings management. Family companies listed on the Indonesian Stock Exchange are more likely to make efficient earnings management than opportunistic earnings management. This is in accordance with the stewardship theory, which states that the agent (manager) is considered not as an opportunistic party, but as a trusted party, who is able to act responsibly and have integrity and honesty towards other parties, namely stakeholders. As managers are parties who can be trusted, managers will try to disclose the company's financial statements in a transparent manner, namely, through integrated reporting that combines financial and non-financial reporting (environmental, social, and governance/ ESG).

According to Francis et al., (2008), companies with a high level of voluntary disclosure will also have high earnings quality. This is because voluntary disclosure increases transparency. Opportunistic earnings management will not occur when companies increase their transparency in financial reporting. Francis et al., (2008) further states that disclosure is a proxy for earnings quality. This means that if high disclosure is presented in the form of integrated reporting, the earnings quality of the company will also be high. Based on this, the following hypothesis is proposed:

Hypothesis: The implementation of IR has a positive effect on earnings quality.

3. Research Methodology

This research is a quantitative empirical study with a sample of 24 family firms in the mining industry listed on the Indonesian Stock Exchange between 2014 and 2017. The reason for using the mining industry is because the mining industry is a high-risk industry associated with various environmental issues (Lodhia and Hess, 2014). Hence, their operations need to be legitimized by integrated disclosure and environmental practices (de Villiers and Barnard, 2000). Further, Adriana (2015) states that the mining sector has the highest rate of compliance with the IR framework.

The sampling is based on criteria taken from the Orbis database-Bureau van Dijk, based on purposive sampling, that is: (1) mining firms listed on the Indonesian Stock Exchange in 2017, (2) family companies that have one shareholder with more than a 50% ownership and greater than 25% belonging to the category "one or more individuals or families" or "employees/managers/directors", (3) companies with complete data availability. The dependent variable of this research is the implementation of integrated reporting: a score of 1 means that the firm uses integrated reporting. The independent variable of this research is earnings quality based on the discretionary accruals measurement from Jones, modified with a cross-sectional model adapted from Kothari et al. (2005). This study also used control variables, including company size (which is measured by the natural logarithm of total assets at the end of the period) leverage (which is calculated by debt ratio, equal to total liabilities to total assets at the end of the period) and listing age (which is measured by first listing year until research year). A robustness test is also conducted to check the results. The earning quality measurement (adapted from Ball and Shivakumar, 2006, as suggested by Pavlopoulos, et al., 2017) is verified. A univariate analysis (adopted from Pearson and Spearman) correlation matrix and a multivariate analysis Ordinary Least Square (OLS) estimation is also used. The research model for this research is as follows:

$$EQ_{i,t} = \alpha + \beta_1 IR_{it} + \beta_2 SIZE_{it} + \beta_3 LEV_{it} + \beta_4 AY_{it} + \varepsilon_{it}$$

EQ is earnings quality, IR is the implementation of IR, SIZE is company size, LEV is leverage, and AY is age in years.

4. Results

Table 1 shows the results of the Pearson and Spearman correlation matrixes. The results show that earnings quality has a positive and significant effect on IR, company size, and leverage. This means that there is a relationship between IR and earnings quality. In addition, large firms and firms with high leverage tend to show higher earnings quality.

Table 1. Results of Pearson and Spearman Correlation

Correlation for Hypothesis	(1)	(2)	(3)	(4)	(5)
(1) EQ	1.00	0.23**	0.09*	0.15**	-0.29
(2) IR	0.19**	1.00	0.11**	0.08**	-0.20
(3) SIZE	0.04*	0.18**	1.00	0.32	0.58*
(4) LEV	0.11**	0.13**	0.41	1.00	0.37
(5) AY	-0.22	-0.21	0.65*	0.43	1.00

** Significance at 5%

*** Significance at 1%

Table 2 shows the results of the Pooled and Fixed Effects Ordinary Least Square (OLS) test. In both OLS tests, integrated reporting is positively and significantly correlated with earnings quality, with a 5% significance level. These results show that earnings quality is positively and significantly associated with IR, company size, and leverage, but is not significantly associated with age in years. This means that family firms that implement IR disclosure tend to have higher earnings quality. Therefore, the implementation of IR has a positive effect on earnings quality. The study also finds that large company size and large leverage is correlated with higher disclosure of data in integrated reporting.

Table 2. Results of Pooled and Fixed Effects Ordinary Least Square (OLS)

Dependent Variable: EQ		Results			
		Pooled OLS		Fixed Effects OLS	
Variable	Expected Sign	Coefficient	Z-statistic (p-values)	Coefficient	Z-statistic (p-values)
Intercept		0.0683**	13.58 (0.03)	0.0726**	14.11 (0.03)
IR	+	0.0388**	8.29 (0.03)	0.0475**	9.01 (0.02)
SIZE	+	0.0072**	5.19 (0.04)	0.0068**	4.26 (0.04)
LEV	+	0.0091**	6.21 (0.03)	0.0108**	7.17 (0.03)
AY	+	-0.0088	4.27 (0.08)	-0.0073	4.19 (0.07)
R2 statistic		0.659		0.621	
N		96		96	

** Significance at 5%

*** Significance at 1%

Table 3 shows the results of the Pooled and Fixed Effects Ordinary Least Square (OLS) used to conduct the robustness test. There is a positive and significant correlation between integrated reporting and earnings quality. This means that firms that implement integrated reporting tend to have a higher earnings quality. Therefore, the implementation of IR has a positive effect on earnings quality. The study also finds that large company size and large leverage is correlated with higher disclosure of data in integrated reporting.

Table 3. Results of Pooled and Fixed Effects Ordinary Least Square (OLS) (Robustness Test)

Dependent Variable: EQ		Results			
		Pooled OLS		Fixed Effects OLS	
Variable	Expected Sign	Coefficient	Z-statistic (p-values)	Coefficient	Z-statistic (p-values)
Intercept		0.0420**	8.18 (0.04)	0.0380**	9.13 (0.04)
IR	+	0.0212**	5.11 (0.04)	0.0305**	6.18 (0.03)
SIZE	+	0.0060**	4.16 (0.04)	0.0063**	3.07 (0.04)
LEV	+	0.0073**	3.17 (0.03)	0.0090**	4.56 (0.03)
AY	+	-0.0052	5.13 (0.06)	-0.0047	4.78 (0.06)
R2 statistic		0.527		0.480	
N		96		96	

** Significance at 5%

*** Significance at 1%

5. Discussion

This research shows that the earnings quality of family firms is positively and significantly associated with IR. These results are consistent with Francis et al. (2008), who state that the earnings quality of a company is influenced by company disclosure decisions. Therefore, integrated reporting can be a useful proxy for controlling earnings quality. These results are also consistent with Atkins and Maroun (2015), who state that investors believe a company that implements IR will have a higher earnings quality. Research by Baboukardos and Rimmel (2016) and Kazemian dan Sanusi (2015) are also in line with these results. This suggests, in line with the stewardship theory, family members are willing to place personal interests before the interest of the company, thereby producing a high earnings quality.

This research also identifies that companies with large assets and leverage will tend to implement higher transparency through reporting more detailed financial data to the public. The greater the company size and the higher the leverage, the higher the company's earnings quality. Only the age in years variable is not significantly associated with earnings quality. This implies that the age of a company may not necessarily effect earnings quality.

6. Conclusion

The aim of this paper is to examine the effect of IR on earnings quality of family firms in the mining industry in Indonesia. It is hypothesized that the implementation of IR provides higher earnings quality. The study observes that the implementation of IR has a positive effect on earnings quality. IR disclosure is a

proxy for earnings quality because IR increases transparency in financial reporting, which produces higher earnings quality information. This paper contributes to global research in this area by creating expectations for a higher level of accounting information quality through the implementation of IR. This paper also provides empirical evidence related to the stewardship theory, hypothesizing that in a family-run enterprise, family members are willing to place their personal interests before the interest of the company. This paper is also expected to provide support to the Financial Services Authority in Indonesia (Otoritas Jasa Keuangan) as well as other authorities in Indonesia. This paper provides evidence on the potential benefits of mandatory disclosure in the form of integrated reporting. This paper highlights the need for corporate transparency and accountability. Possible future research may focus on the quality of integrated reporting, for example, the broadness of disclosures related to the six capitals of integrated reporting.

References

- Achleitner, A. K., Gunther, N., Kaserer, C., and Siciliano, G. (2014). Real Earnings Management and Accrual-based Earnings Management in Family Firms. *European Accounting Review*, Vol. 23(3), pp. 431-461.
- Adriana. (2015). Analisis Kesiapan Menerapkan IR Pada Index LQ-45. Thesis Master of Accounting Faculty of Economics and Business, Gadjah Mada University, Yogyakarta.
- Atkins, J. F., & Maroun, W. (2015). Integrated reporting in South Africa in 2012: Perspectives from South African institutional investors. *Meditari Accountancy Research*, 23(2), 197-221.
- Ball, R., & Shivakumar, L. (2006). The role of accruals in asymmetrically timely gain and loss recognition. *Journal of accounting research*, 44(2), 207-242.
- Baboukardos, D., & Rimmel, G. (2016). Value relevance of accounting information under an integrated reporting approach: A research note. *Journal of Accounting and Public Policy*, 35(4), 437-452.
- Chi, C. W., Hung, K., Cheng, H. W., & Lieu, P. T. (2015). Family firms and earnings management in Taiwan: Influence of corporate governance. *International Review of Economics & Finance*, 36, 88-98.
- De Villiers, C. J., & Barnard, P. (2000). Environmental reporting in South Africa from 1994 to 1999: A research note. *Meditari Accountancy Research*, 8(1), 15-23.
- De Villiers, C. J., Rinaldi, L., & Unerman, J. (2014). Integrated Reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability Journal*, 27(7), 1042-1067.
- De Villiers, C. J., Venter, E. R., & Hsiao, P. C. K. (2016). Integrated reporting: background, measurement issues, approaches and an agenda for future research. *Accounting & Finance*.
- De Villiers, C. J., Hsiao, P.-C. K., & Maroun, W. (2017). Developing a conceptual model of influences around integrated reporting, new insights and directions for future research. *Meditari Accountancy Research*, 25(4), 450-460.
- Francis, J., Nanda, D., & Olsson, P. (2008). Voluntary disclosure, earnings quality, and cost of capital. *Journal of accounting research*, 46(1), 53-99.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of accounting and economics*, 31(1-3), 405-440.
- IIRC. (2011). The future of corporate reporting: towards a common vision. https://www.kpmg.at/uploads/media/The_Future_of_Corporate_Reporting_Web.pdf.
- IIRC. (2013). The international <IR> framework. <https://integrated-reporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTER-NATIO-NAL-IR-FRAME-WORK-2-1.pdf>.
- Kazemian, S., & Sanusi, Z. M. (2015). Earnings management and Ownership Structure. *Procedia Economics and Finance*, 31, 618-624.
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of accounting and economics*, 39(1), 163-197.
- Krzus, M. P. (2011). IR: if not now, when. *Zeitschrift für Internationale Rechnungslegung*, 6, 271-276.
- Lodhia, S., & Hess, N. (2014). Sustainability accounting and reporting in the mining industry: Current literature and directions for future research. *Journal of Cleaner Production*, 84, 43-50.
- Pavlopoulos, A., Magnis, C., & Iatridis, G. E. (2017). IR: Is it the last piece of the accounting disclosure puzzle? *Journal of Multinational Financial Management*, 41, 23-46.
- Siregar, S. V., & Utama, S. (2008). Type of earnings management and the effect of ownership structure, firm size, and corporate-governance practices: Evidence from Indonesia. *The international journal of accounting*, 43(1), 1-27.

- Sofian, Ioana & Dumitru, Madalina. (2017). The compliance of the integrated reports issued by European financial companies with the International IR Framework. *Sustainability*, 9, 1319, 1-16.
- Soler, I. P., Gemar, G., & Guerrero-Murillo, R. (2017). Family and non-family business behavior in the wine sector: A comparative study. *European Journal of Family Business*, 7(1-2), 65-73.
- Velte, P., & Stawinoga, M. (2017). Integrated reporting: The current state of empirical research, limitations and future research implications. *Journal of Management Control*, 28(3), 275-320.
- Wang, D. (2006). Founding family ownership and earnings quality. *Journal of accounting research*, 44(3), 619-656.