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Does the UK Companies Act of 2006 matter for the private companies? Evidence from real and accruals earnings management practices

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Abstract

Purpose – The purpose of this study is to examine both accruals and real earnings management in a large sample of private companies in the UK using data from 2002 to 2009 following the implementation of the UK Act of 2006.

Design/methodology/approach – A panel data analysis using GMM has been adopted to examine the objectives of the study and answer the research questions.

Findings – The results of this study showed that the imposition of the Companies Act of 2006, on its own, did lead to changes in earnings management behaviour, in both accruals-based earnings and real earnings management. Moreover, this study also found that firms that chose to provide IFRS financial statements tended to show less discretionary earnings management, however, it tended to have no impact on real earnings management.

Practical implications – In accordance with the research findings, standard setters with some insight tend to determine how capital markets see the information provided under the legislation such as the UK Act of 2006 in developed countries and thereby ensure long-term sustainability in a modern and sophisticated financial world. This study provides an insight into the successful implementation of the UK act of 2006, and its influence on the aspect of financial reporting.

Originality/value – The novel conclusion reached in the study is that there exists a strong and direct link between the smooth implementation of UK Act of 2006 and the practices of both accruals and real earnings management in real-world business and financial scenarios, particularly, in private companies.

Keywords Earnings management, Discretionary accruals, Real earnings, UK Companies Act, IFRS, Private companies

Paper type Research paper



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of 2006

Companies Act

1. Introduction

Accounting principles allow management to have some flexibility in reporting earnings, leading to subjective interpretation. Unlike illegal accounting manipulations which are prohibited by law, earnings management involves legal actions to manipulate shareholders' perceptions of a company's financial performance (Stolowy and Breton, 2004). According to McKee (2005), earnings management involves practices such as manipulating accruals. These actions can be used to hide serious wrongdoing, which has been seen in the collapse of companies like Enron, as noted by Benston and Hartgrayes (2002).

Accruals manipulation is a major source of earnings management (Dechow and Skinner, 2000). The accrual accounting system applies the matching principle, which requires subjective decisions and can be misused by management to manipulate earnings figures for various incentives. Real earnings management differs from accruals management because it has a tangible economic impact (Roychowdhury, 2006). Examples include offering temporary discounts to boost sales or overproduction to report lower costs. Real earnings management is receiving increased attention in accounting research as studies have found a rise in this behaviour following the implementation of the Sarbanes-Oxley Act, which led to a decrease in accruals-based earnings management (Cohen *et al.*, 2008; Cohen and Zarowin, 2010).

Agency theory explains why managers engage in earnings management. In modern corporations, individual shareholders often lack incentives to monitor managers, leading managers to prioritise personal benefit over shareholder value. The principal-agent problem was first described in Ross (1973) and later formalised by researchers such as Jensen and Meckling (1976) and Grossman and Hart (1983).

In modern corporations with diffuse shareholdings, individual shareholders frequently do not have the economic incentives to monitor the managers of the companies they have invested in. In turn, managers who realise that they are not being closely monitored may be incentivised to take actions that benefit themselves rather than the shareholders. Some of these activities may even lead to decreases in shareholder value. From an agency perspective, such scrupulous behaviour is needed to be reduced as much as possible. In this regard, the regulation can work as a shield to minimise or reduce it. Thus, the companies UK act of 2006 is one of the possible solution that can enhance the reporting and accounting quality. The main objective of the introduction of UK companies Act 2006 is to have a better commitment from the companies and more confidence from shareholders. Such reforms contain a huge rules and principles for all UK companies be either public or private firms, The implication of which is that it would have an influence on plenty accounting events as it is concerned with public, private companies and limited liability partnerships (Guo, 2015).

Under the UK Act, companies must file their accounting reports, appoint auditors and prioritise timely reporting. Directors face greater responsibility and liability if company affairs are negatively impacted, with specific duties outlined to ensure accurate financial reporting. The Act aims to modernise and simplify UK company law, making financial reporting more comprehensible and reducing information asymmetry. This should encourage directors to govern companies in a manner that prioritises shareholder interests, resulting in high-quality accounting information.

Prior research has looked into specific influence of new regulations on public listed companies and whether earnings management is reduced following these regulations, for examples (Pelucio-Grecco et al., 2014; Aubert and Grudnitski, 2012; Dang et al., 2017; Alareeni, 2018; Mohamad et al., 2012). Despite that, little has been done with regards to the private companies of UK. Thus, this study aims to investigate of earnings management behaviour in private companies in the UK following the implementation of the UK Act of 2006 and factoring in some variables that may influence the earnings management as well. This has been examined for the case of private companies before by authors such as Ball and Shivakumar (2005) but there have been significant changes in the legislation in the UK which

makes this investigation particularly timely. The UK Companies Act of 2006 would, among others, allow UK private companies to choose whether they would file their financial statements under UK GAAP or IFRS accounting standards. Further, the 2006 Companies Act requires all private companies to have their financial statements professionally audited by an external auditor before they can be filed.

Therefore, examining the trends of earnings management of a sample of private companies prior to the UK company act of 2006 and comparing with the period following the adoption of the UK Act would have an implication on the effectiveness and usefulness of such enhanced regulations.

This study will add to the research literature that examines earnings management behaviour in private companies. A majority of the literature examines earnings management behaviour only in public companies as public companies have higher levels of disclosure which leads to greater availability of data (for example, Alsharairi and Iqtait, 2017). By restricting inquiry into private companies in the UK and using a large and high quality database of private company information, this study will be able to contribute to some of the literature examining earnings management behaviour in private companies, particularly, following the implementation of UK Act of 2006.

In addition, this study also contributes to the literature by considering both accruals management and real earnings management in its investigation of earnings management. Real earnings management models are relatively new in the literature and this study will draw on the earnings management models described and used in Roychowdhury (2006) and Cohen and Zarowin (2010) in investigating real earnings management behaviour. Given that earnings management is not restricted to managing accruals, but also comprises activities such as booking revenues early (when they have not truly been earned) or deferring expenses such as R&D or marketing to a future period, investigation of earnings management would be more insightful when real earnings management is also considered. In fact, a consideration of real earnings management may be even more important as, unlike accruals management which involves only accounting manipulations, real earnings management may have economic consequences on the company.

Finally, this study adopts the advanced methodological approaches to investigate the pertaining issue. To best of our knowledge, this study is among of the early attempts in area of earnings management of private firms that uses of advanced methods of analysis namely dynamic GMM to account for the related econometric issues that are linked with the either OLS or panel static methods. The findings of the panel GMM indicate that the imposition of the Companies Act of 2006 was significantly impacted the earnings management practices in both proxies, the discretionary accrual and real earnings management behaviour of UK private companies. Since the effect of the Companies Act on earnings management behaviour might be channelled through the introduction of IFRS as an alternative to UK GAAP in preparing financial statements, this study also re-examined if the use of IFRS had any influence on earnings management behaviour. This study found that IFRS was associated with a reduction in earnings management behaviour as measured on the Modified Jones Model but not in the case of the real earnings management model.

The remainder of the paper is organised as follows. Section 2 reviews prior literature and hypothesis development. Section 3 discusses the methodology. Section 4 reports the empirical while Section 5 concludes.

2. Literature review and hypotheses development

2.1 Literature review

Studies suggest that motivations for earnings management differ in private companies due to more concentrated shareholdings, making the information power of earnings less significant.

Ball and Shivakumar (2005) compared earnings management between public and private UK companies, finding that private companies had lower earnings quality. However, the authors argued that this output may not be sub-optimal as the demand for financial information in private companies is lower than that of public companies. Changes in UK company law requiring private and public companies to file audited accounts using similar accounting standards prompted the comparison.

Abu Afifa et al. (2023) found that audit firm industry specialisation positively affect earning management. Within this context, Usman et al. (2022) present new evidence from UK firms showing that board mechanisms reduce the extent of earnings manipulation among UK firms with higher discretionary accruals (DACC) than firms with low and medium DACC levels. Gavana et al. (2022) pointed out that family firms use related party transactions in association with downward accrual-based earnings management and real earnings management perpetrated by abnormal discretionary expenses as well as a substitute of real earnings management via abnormal production costs. Chen et al. (2010) found that IFRS adoption led to improvements in accounting quality, including lower earnings management.

Various studies have found that specific accounting adjustments under IFRS, such as share-based payments, goodwill amortisation, impairments and deferred taxes, are related to the increase in value relevance (Horton and Serafeim, 2010). While the implementation of IFRS is generally associated with increased market liquidity and equity valuation, other factors such as institutional factors and the ability of national authorities to enforce accounting regulations may moderate this effect (Daske *et al.*, 2008). IFRS improves shareholder value by reducing information asymmetry, providing higher quality information for analysts and increasing comparability between firms (Clarkson *et al.*, 2011; Horton *et al.*, 2013).

Ball and Shivakumar (2005) identified three key features of UK financial reporting regulations that apply equally to public and private companies: the requirement for annual financial statements, professional external audits and similar tax laws. However, private companies were allowed to use either IFRS or the previous UK GAAP. Studies have shown that institutional factors play a significant role in determining the adoption of IFRS by private companies. Francis *et al.* (2008) found that institutional factors shaped decisions to adopt IFRS in developed and developing countries, while Bassemir (2018) found that private equity funding and legal organisation as stock corporations were important drivers of IFRS adoption. In the UK, André *et al.* (2012) found that internationality, leverage, firm size and auditor reputation were positively related to voluntary adoption of IFRS, while factors such as profitability, capital intensity and industry did not have a significant effect. These findings suggest that the decision to adopt IFRS in the UK, or not, is largely driven by reporting incentives.

2.2 Research hypotheses

The work of Cohen et al. (2008) in the USA has shown that firms, in response to the Sarbanes-Oxley Act, had increased the amount of real earnings management behaviour even as they decreased accruals management. However, this work focused on US public companies which, may be substantially different to UK private companies. Achleitner et al.'s (2014) research considered real and accruals-based earnings management in private companies albeit those in Germany and restricting their sample to family firms. It is possible, however, that the Companies Act amendments in 2006 which overhauled corporate governance may lead to increased real earnings management behaviour but less accruals management as the Companies Act of 2006 has often been compared to the Sarbanes-Oxley Act in the US (Paulo, 2010) which was found to have increased real earnings management and decreased accruals management (Cohen et al., 2008). The rational for this relationship is that it is obvious that auditor would be more aware the accrual earnings rather than real earnings. Moreover, the political concerns over earnings through accruals earnings motives auditors and companies to be more aware of the

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consequences of such opportunistic behaviour that creates threat to the soundness and health of the market. On the contrary, real earnings management is not obvious and hence it is less fuzzy to cause the auditors concerns as it is done within the real operation decision of productions and pricing. Thus, if the companies are more concerned after the UK act, the expectation is that managers would be more motivated to engage in real earnings management than accrual earnings as the quality of information would be enhanced and manager would be less motivated to indulge in accrual-based earnings. Thus, we propose the following hypothesis:

- H1. There is positive relationship between real earnings management and the UK Companies Act of 2006 rules allowed private firms to choose between IFRS and UK GAAP reporting.
- H2. There is negative relationship between accruals earnings management and the UK Companies Act of 2006 rules allowed private firms to choose between IFRS and UK GAAP reporting.

3. Methodology

3.1 Data and sample

The population of this study is all private companies in the UK. Private company accounting data was obtained from the Amadeus database available from Bureau van Dijk which is a comprehensive database with financial and business information on approximately 500,000 European public and private companies. The data were obtained for the financial years from 2002 to 2009 to capture data from all the years before the imposition of the Companies Act of 2006 and after implementation of the new Companies Act. More specifically, the sample used in this study includes all firms that have adopted IFRS in 2005. In essence private companies that continue to file their accounting reports under UK GAAP after 2006 were excluded. The reason behind the filtration process is to have our data consistent and reported using same financial accounting and reporting standards. Therefore, those firms were compared with the similar firms prior to the introduction of UK act of 2006 so as to have a comparable sample. The process ends up with an unbalanced panel data of 2096 observations over the period of 2002–2009. Table 1 explains the sampling process.

3.2 Variables measurement

Since the aim of the paper is to examine the impact of UK company Act of 2006 on earnings management practices, we first estimate the dependent variable "earnings management" using two different proxies. While the first proxy is used to capture the discretionary accrual, the second proxy is employed to track the real earnings management as both of them have different parameters to be used in the estimation and also the aims and incentives, and approaches to commit it are different two proxies of earnings management that were used by accounting literature. In specific, the first proxy is aimed to detect the level of the so-called "accrual earnings

Sampling process employed (including IFRS adaptors in 2005)

UK private companies from Amadeus database (excluding financial companies) Firm-Year (2002-2009)

Sampling process employed (only IFRS adaptors in 2005)

UK private companies from Amadeus database (excluding financial companies) Unbalanced firm-year observations (2002–2009)

Source(s): Adopted by authors

10,059 companies 80,472 observations

262 companies 1,049 observations

of 2006

Companies Act

management" and normally measured by estimation of abnormal accruals (or discretionary accruals) and refers to the segment of accruals that is not "normal" or expected (i.e. not based on the company's real transactions) (Marra et al., 2011; Kolsi and Attayah, 2017; Ben Amar, 2014). Hence, the abnormal accruals are measured using Jones-type models (Dechow et al., 1995; Jones, 1991; Kothari et al., 2005). In this study, the modified Jones model (Dechow et al., 1995) was adopted. Dechow et al. (1995) argued that the modified Jones model is more powerful at detecting earnings management than the original. They added the change in accounts receivable to control for the possibility that revenue recognition is subject to manipulation by management. The Modified Jones Model proposed in Dechow et al. (1995) is described below:

NDA_{it} / A_{it-1} =
$$\beta_0(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it}/A_{it-1}) + \beta_2(PPE_{it}/A_{it-1})$$

DA_{it} = TA_{it} / A_{it-1}-[$\beta_0(1/A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it}/A_{it-1}) + \beta_2(PPE_{it}/A_{it-1})$]

where ΔREC_t is the change in net receivables from time t-1 to time t as a proportion of t-1's total assets. The Modified Jones Model removes the bias of the standard Jones model by implicitly assuming that all credit sales represent earnings management behaviour.

On the other hands, the second proxy of earnings management is the real earnings management, which has generally been less extensively examined within the literature. The more recent literature has focused on the real earnings management models described in Roychowdhury (2006) and validated by Cohen and Zarowin (2010). Real earnings management can be achieved by accelerating the timing of sales by granting more lenient credit terms or increasing price discounts, reporting lower cost of goods sold by increasing production to spread the fixed cost of production over a larger number of units, or decreasing discretionary expenses including advertising, R&D and SG&A expenses (Cohen and Zarowin, 2010).

Using Cohen and Zarowin's (2010) methodology, we first generate the normal levels of CFO as a linear function of sales and changes in sales and run the following cross-sectional regression for each industry and year:

$$\frac{CFO_{it}}{Assets_{i,t-1}} = \frac{k_{1t}}{Assets_{i,t-1}} + \frac{k_2Sales_{it}}{Asset_{i,t-1}} + \frac{k_3\Delta Sales_{it}}{Assets_{i,t-1}} + \varepsilon_{it}$$
(4)

Thus, abnormal CFO would be the actual CFO minus normal level of CFO estimated using the coefficients from (4).

Normal production costs are defined as:

$$\frac{Prod_{it}}{Assets_{i:t-1}} = \frac{k_{1t}}{Assets_{i:t-1}} + \frac{k_2Sales_{it}}{Assets_{i:t-1}} + \frac{k_3\Delta Sales_{it}}{Assets_{i:t-1}} + \frac{k_4\Delta Sales_{it-1}}{Assets_{i:t-1}} + \varepsilon_{it}$$
 (5)

and normal levels of discretionary expenses are:

$$\frac{DiscExp_{it}}{Assets_{i,t-1}} = \frac{k_{1t}}{Assets_{i,t-1}} + \frac{k_2Sales_{i,t-1}}{Assets_{i,t-1}} + \varepsilon_{it}$$
 (6)

Cohen and Zarowin (2010) then combine the various real earnings management variables into a single comprehensive measure of real earnings management behaviour. The procedure for consolidating these variables are described in the following sets of equations:

$$R_{CFO} = \frac{CFO_{it}}{Assets_{i,t-1}} * (-1)$$

$$R_{DISC} = \frac{DiscExp_{it}}{Assets_{i,t-1}} * (-1)$$

$$R_{PROD} = rac{Prod_{it}}{Assets_{i,t-1}}$$
 $R_{PROXV} = R_{CFO} + R_{DISC} + R_{PROD}$

Once we estimate the earnings management practices, then we regress it with the UK act of 2006 as the main independent variable, and accounting for other firm's specific variables. Thus, the following model was developed:

$$\begin{aligned} DA_{it} &= \alpha_0 + \beta 1DA_{t-1} + \beta 2SIZE + \beta 3ACT_{it} + \beta 4SOLV_{it}\beta 5ROA_{it} + \beta 6BIGA_{it} \\ &+ \beta 7CRISIS_{it} + \beta 8IFRS + \text{vi} + \varepsilon \text{it} \end{aligned}$$

where DA_{it} is the dependent variable, which is the proxy of earnings management models (Discretionary Accruals) as discussed in the beginning of this section. DEP_{it-1} represents the lag dependent variable. SIZE refers to the total assets of the firm and is used to control for the size effects. COMPANYACT is a dummy variable that takes the value 1 if the Companies Act of 2006 is in force, which covers the period of 2006 and afterwards and 0 otherwise, SOLVENCY is the firm's After Tax Net Profit excluded Depreciation to Total Liabilities ratio (SOLV), PROFITABILITY is the return on the firm's assets (ROA), BIG4 is a dummy variable that takes the value 1 if the firm has been audited by one of the Big 4 auditors and 0 otherwise, and profitability is used to control for the performance of the firms, the dummy crisis is used to account for the financial crisis of 2008, finally IFRS is a proxy for the adoption of IFRS, where 1 indicates the starting date of IFRS adoption and 0 otherwise. These variables have been added to the regression equation to test whether they are significant in explaining variations in earnings management behaviour as suggested in the literature.

Econometrically, in order to test the above model, the paper adopts the dynamic panel model which is more appropriate, in order to address the problems of autocorrelation related to the lagged dependent variable and the heterogeneity among the regression. As panel static models do not take into consideration, the possible autocorrelation associated with pooled data, which can lead to inefficient estimates (Greene, 2008). Hence, the paper accounts for these issues using the Generalised Method of Moments (GMM) of Arellano and Bond (1991).

The GMM difference is an alternative option within GMM models, but it has a weakness with regards to instrument and autocorrelation between lag dependent variables and the error term. Accordingly, there is a need to solve the weakness found, using the two-step difference GMM estimator of Arellano and Bond (1991). Arellano and Bover (1995) and Blundell and Bond (1998) argued that more restriction is needed to overcome those weaknesses related to the autoregressive parameter and the variance of the parameter, and therefore they introduced system GMM as alternative and more robust estimator. The twosteps system GMM is adopted in this study, as the GMM difference is not suitable for unbalanced data and magnifying gaps (Roodman, 2009). The two-steps system has a power to produce more asymptotic efficient estimates than the one-step system. However, the twosteps model has two main problems, one of which is the possibility of standard errors biased downward, which can be solved over correction using the Windmeijer's technique (2005), while the second problem is related to the possible existence of multiple instruments, where it requires that number of instruments should be less than number of groups in the sample. As the results of this study show in the following section, this problem does not exist. Therefore, we believe that the two-steps system GMM with standard errors correction is most appropriate to address the above issues.

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4. Results and discussions

To present the findings, initially it is insightful to report and comment on some preliminary characteristics of the data. Table 2 shows the descriptive statistics of the earnings management trends and other repressors used in the model. On average, the earnings management using discretionary accruals shows an average of -0.03. Most firms in the sample are either small or medium-sized enterprises (SMEs). The mean total assets of the sample are £338.76 with a standard deviation of £1,623.76. However, the smallest companies have a value of £0 for total assets while the largest company in the sample has total assets of £18,448m. The firms within the sample showed an ROA of -7.19% on average (s.d. 22.60%) with a median.

Finally, we compare between the Solvency ratios of the firms in the survey to examine the capital structure employed by the private firms included within our sample. The mean Solvency ratio was 49.57% (s.d. 28.19%) with a median solvency ratio of 38.5%. The sample showed significant range with the most heavily indebted firm showing a Solvency ratio of -65.05% while the most solvent firms had a solvency ratio of 100.00%. The descriptive statistics of the entire sample are summarised below in Table 2.

We also test the multicollinearity among repressors and Pearson correlation matrix is shown in Table 3. As a rule of thumb, a correlation between (r = +-0.70) is more likely to indicate that multicollinearity among repressors is not a problem. All correlations fall within the acceptable range.

To test the empirical model, the GMM is applied and the results are reported in Table 4. Table 4 reports that the null hypothesis of no first order autocorrelation is rejected and the null hypothesis of the no second-order autocorrelation cannot be rejected. The *p*-value of the Arrelano and Bond test of second order autocorrelation does not reject the null hypothesis indicating that there is no second-order autocorrelation, which does not pose any problem to our estimation technique. In other words, these results confirm the usage of a dynamic panel data model in which several variables are instrumented; using lags of these variables

Variable	Mean	Std. dev	Min	Max
Discretionary accrual (DA) Real earnings management (REM)	-0.03 0.028	0.20 0.883	-1.70 -3.480	4.00 4.882
Size (in million)	338.76	1,623.76	1	18,448
ROA%	-7.19	22.60	-99.20	83.16
Solvency%	49.57	28.19	-65.05	100
Source(s): Adopted by authors				

Table 2. Descriptive statistics

	lnSIZE	UKACT	lnSOLV	lnROA	BIG4	CRISIS	IFRS
lnSIZE	1.00						
UKACT	0.04	1.00					
lnSOLV	-0.18***	0.02	1.00				
lnROA	0.32*	-0.02	-0.02	1.00			
BIG4	0.45*	-0.07	-0.07**	0.08*	1.00		
CRISIS	0.04	0.35*	-0.01	-0.04	-0.02	1.00	
IFRS	0.14	0.54*	-0.03	0.03	0.02	0.31*	1.00

Note(s): ***Panel standard errors in parentheses p < 0.1; **panel standard errors in parentheses p < 0.05; *panel standard errors in parentheses p < 0.01

Source(s): Adopted by authors

Table 3. Pearson correlation

5.060 0.310 $10.440 \\ 1.170 \\ -2.140 \\ -0.530 \\ -1.390$ Z- pvalue Model 3 Coeff and std -0.722 (0.143) 0.031 (0.099) 0.187 (0.018) 0.030 (0.026) -0.002(0.001)-0.054 (0.103)-0.053(0.038)0.267 (0.082)0.698 0.671 -1.650***-1.720***Z-b-value 2.050** 5.210* -0.8200.360 Panel B real earnings -0.125 (0.154) 0.299 (0.057)0.014 (0.038) -0.005 (0.002) -0.076 (0.044) 0.453(0.165)-0.310(0.188)Soeff and std 0.418 0.406 0.240 err -1.670***-1.690***Z-p-value -2.080**2.870* 5.410* -3.060*0.360 Model 1 0.405 (0.141) -0.844 (0.276) 0.290 (0.054) 0.014 (0.038) -0.004 (0.002) -0.084 (0.050) Coeff and std -0.308(0.185)0.525 0.624 0.235 510 err Z and p--2.04** 2.36** -3.34* -1.29 3.12* -3.42*value Model 3 Coeff and std 0.047(0.013)-0.008(0.004)-0.020(0.006)0.010 (0.004) -0.012 (0.010) 0.002 (0.001) -0.134 (0.039) 0.003 (0.006) 0.412 1,049 0.00 0.501 E Panel A discretionary accrual (eq1) -1.360 3.190* -3.320* Z and p--3.730* 2.270* 3.470* 0.640 value Coeff and std 0.047 (0.014) -0.025(0.007)0.009 (0.004) -0.013(0.010)0.002 (0.000) -0.128(0.039)0.004 (0.006) 1,049 0.422 0.001 0.526 2.350** -1.530 3.870* -3.460* Z and p-3.900* -3.280* value -0.440Model 1 Coeff and std 0.009 (0.004) 0.047 (0.012) 0.016 (0.005) -0.013(0.008)0.002 (0.000) -0.130(0.038)-0.002(0.005)1,049 0.434 0.00 err No of obs UKACT nSOLV CRISIS Hansen **INSIZE** hROA FRS BIG4 Ar(1) Ar(2)

ogarithm of total assets; Insolvency is the proxy for the leverage of the firms; InROA represents the natural logarithm of ROA; BIG4 is the auditor type; CRISIS is the Lag 1 represents the lag of dependent variable; UKACT is the act imposed in 2006; IFRS reflects the dummy variable for adopters and non-adopters; LnSize is the natural Note(s): ***Panel standard errors in parentheses $\rho < 0.1$; **panel standard errors in parentheses $\rho < 0.05$; *panel standard errors in parentheses $\rho < 0.01$ variable controlling for the period pre and post 2008 financial crisis Source(s): Adopted by authors

Table 4. Testing impact of UK act on earning management

removes autocorrelation in the second order. Further, the study employed the Hansen test and confirmed the validity of instruments, indicating the existence of a dynamic relationship between earnings management practices. The UK Company Act of 2006 significantly and negatively influenced earnings management practices in both measures, accrual and real earnings management, supporting the findings of Carcello and Li (2013) that the requirement of audit engagement partners to sign the audit report improved financial reporting quality.

The study found that IFRS negatively influences earning management practices as measured by discretionary accruals but not for real earnings management. This is consistent with previous studies by Chen *et al.* (2010) and Aussenegg *et al.* (2008) which also found a decrease in discretionary accruals and less earnings management under IFRS, respectively. The study also suggests that company size plays a role in determining earning management behaviour, with larger companies showing higher earnings management practices, especially in real earnings management. With respect to the firm size, the results report a consistent a positive relationship in all models suggesting the notion behind the political sensitivity costs of Watts and Zimmerman (1978), where larger firms are more willing than smaller firms to engage more in earnings management. In a different direction, Lobo and Zhou (2006) suggest that larger firms may be more inclined to manage their earnings because the complexity of their operations makes detecting overstatement more difficult. The solvency is not related to earnings management both the discretionary and the real earnings management.

The other results of the regression also suggest that discretionary accruals as measured by the Modified Jones Model are positively related to firm profitability measured by the ROA, however, it is negatively related to the real earnings management. It might be a logical consequence of having a high level of discretionary accruals due to high profitability level and manager are more inclined to manage the earnings when they perform better to avoid high tax payment. At the same time when companies achieve a lower profit, they would manage earning less likely as the tax incentive is less obvious. However, the negative relationship with real earnings management might suggest that when the company performs well, the managers are more likely to decelerate the timing of sales to next period, leading limiting sales and hence will reduce current earnings.

With respect to the audit firm type, the results show a negative and strong influence on the discretionary accruals, while the impact on the real earnings management has the same direct, albeit it is significant at 10%. This suggests that firms who use Big 4 auditors tend to show less discretionary accruals. This appears to be a consistent with the literature such as Heninger (2001), and Khurana and Raman (2004), who found that the use of Big 4 auditors was related to less discretionary accruals and earnings management activity. A possible explanation for this finding is that firms that make more discretionary accruals also tend to be more financially sophisticated and have more intense auditing needs, which suggests that they tend to require the services of more skilled auditors such as those represented by the Big 4 auditors.

Finally, the crisis does no has any impact on the discretionary accrual, however, it affects negatively and significantly at 10% the real earnings management. It suggests that during the crisis periods, the companies tended to have less real earnings management. There was no significant relationship between the estimate of discretionary accruals with the Companies Act dummy variable.

5. Conclusion

This study has found that there is direct link between the introduction of the Companies Act of 2006 and financial statement quality in UK private companies. Earnings management behaviour, whether it takes the form of accruals management or real earnings management, appeared to be influenced by the introduction of the act. The negative relationship found in

this study between the use of IFRS and discretionary earnings management behaviour appears to be consistent with the existing research and the results is a robust in all models that take into account the IFRS as predictor of discretionary accruals (Model 2 and 3 in panel A) although this result is likely not robust when the earnings management is measured by real activities.

The study found a link between the Companies Act of 2006 and improved financial statement quality in UK private companies, but the use of IFRS had a negative relationship with discretionary earnings management. The study suggests that allowing private companies to choose between UK GAAP or IFRS may not be sufficient to drive demand for greater "value relevance" in financial statements, as private firms may have few incentives to change their financial reporting methodology.

The study found that reporting in IFRS did not necessarily mean better earnings quality than firms reporting in UK GAAP. IFRS-reporting firms may have been better equipped to handle the increased reporting requirements and engage in earnings management. Therefore, the implementation of IFRS alone may not be enough to improve earnings quality. Without addressing the underlying motives for earnings management, mandating IFRS compliance may result in firms finding other ways to engage in earnings management.

The implication of these findings for regulators is thus that allowing firms to choose between two or more accounting standards would lead to improved earnings quality on their own: it is likely that companies will opt to report in whichever accounting standard that allows them to report the "best" earnings. According to DeAngelo et al. (1996), managers of public firms have a strong incentive to avoid losses in reporting earnings, which could outweigh the desire to use a more stringent financial reporting standard. Coppens and Peek (2005) and Burgstahler et al. (2006) showed that the value relevance of earnings figures was less in private companies than in public companies, which may lead managers of private companies to engage in earnings management to reduce taxes. These observations may explain why most companies in the study opted to continue reporting in UK GAAP rather than IFRS. Introducing tax or other financial incentives to private companies to switch to IFRS may encourage them to do so (Coppens and Peek, 2005; Burgstahler et al., 2006). However, the results found in this study have been subject to some limitations that were discussed in the previous Results chapter. When considering these limitations, the following proposals for future research can be made.

Future research can explore the use of multiple databases to expand the universe of private companies and test the robustness of the findings. Additionally, further investigation can be done on the potential effects of the Companies Act of 2006 by examining other variables affected by the act, such as audit fees. This would lead to a more detailed analysis of the relationship between the Companies Act imposition and earnings management behaviour. Furthermore, further research could explore some of the reasons why private companies, according to the Amadeus database, have largely chosen to continue reporting in UK GAAP rather than switching to IFRS. This study only made speculations of the possible reasons—for instance, private companies may be attracted to the possibility of using earnings management to reduce taxes payable which would not be present if they reported in IFRS—but these reasons have not been explored in this study. Exploration of the causes for firms to choose UK GAAP over IFRS may provide further insight to regulators and suggest possible solutions to increasing the rate of IFRS adoption among private companies in the UK.

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