

DETECTING EARNINGS MANAGEMENT IN THE LIBYAN COMPANIES

Alhussien Elseraiti¹
Ibrahim Eldanfour²

ABSTRACT

Measuring discretion over earnings is an essential element of any test for earnings management (McNichols, 2000). The accruals-based approach is commonly utilised to detect signals of earnings management activity (Healy, 1985; Jones, 1991; Dechow et al., 1995). This study investigating the existence and the direction of earnings. The Modified Jones model included CFO and ROA was applied to investigate the existence and the direction of earnings management in the unlisted companies (state-owned and private companies) in Libya. Moreover, this particular study investigated the effect of the nature of company ownership and company size. The results showed that Libyan companies are engaged in earnings management by using both income-increasing and income-decreasing policies accruals. The majority of the companies that adopted income-increasing policies accruals were from the private companies group. In addition, there is a relationship between the direction of earnings management and company size.

Key Words: Earnings Management, Discretionary Accruals, Income-increasing and Income-decreasing.

¹Accounting Department, Misurata University/Libya, Alhosrs@yahoo.com, 00218925516103

²Management Department, Collage of Medical Technology, Eldanfour2000@hotmail.com, 00218918130536

1. INTRODUCTION

The purpose of financial reports is to provide information about the organisation's financial performance, and the financial position of the organisation. However, financial reports of low quality provide information that leads to problems in the allocation of resources (Schipper & Vincent, 2003). According to Leuza et al. (2003), financial reports with extensive earnings management inaccurately reflect corporations' performance, and thus weaken users' ability to assess the corporation performance. Therefore, practicing earnings management may cause misrepresentation or may reduce the transparency of financial reports, which will affect the decisions of users of financial reports, who rely on their accuracy. Healy and Whalen (1999, p. 368) define earnings management as "when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers".

In the literature review, attempts have been made to investigate the extent to which financial statements are manipulated through different techniques to reach different goals. Research into earnings management has been quite diverse, and has looked into different areas and used different approaches. According to Ronen and Yaari (2007), earnings management research can be classified into: theoretical research and empirical research. Firstly, examples of theoretical research include the study of Lambert (1984), who examines real smoothing strategy whereby management uses its flexibility in making investment and production decisions to reduce the variability of the firm's value. Dye (1988) rationalises the external and internal demand for cosmetic earnings management. The external demand follows from the capital market's need to price the firm, and the internal demand follows from the principal agent relationship between owners and management. Also, Ronen et al., (2003) examined the effect of earnings management on voluntary disclosure and the demand for additional information.

Secondly, empirical research on the accounting literature have provided a number of approaches that have varying characteristics. McNichols (2000) provides three approaches that are typically employed to estimate the discretionary element, which are the aggregate accruals, specific accrual and distributional approaches. The specific accruals approach focuses on a set of specific accrual or the influence of managers' discretion on specific accrual to test earnings management (McNichols, 2000; Marquardt & Wiedman, 2004). The previous studies of specific accrual in the literature can be classified into two categories: single accrual studies, such as McNichols and Wilson (1988) and Petroni (1992); and set of accruals studies, such as Beneish (1997) and Marquardt and Wiedman (2004). The distributional approach tests expected frequencies of earnings, and assumes that management has motivations to meet certain earnings benchmarks, such as sustaining recent profit performance or reporting positive profits. According to Goncharov (2005), the distribution approach tests the existence of earnings management by using a distribution of scaled performance measures (i.e. earnings and changes in earnings). Moreover, it focuses on the statistical properties of earnings to determine behaviour that affects earnings, and it is based on the distribution of earnings after management (McNichols, 2000).

The aggregate accruals approach utilises the change in total accruals as a measure of discretionary accruals. The accruals-based approach is commonly utilised as signals for earnings management activity (Healy, 1985; Jones, 1991; Dechow et al., 1995). The aggregate accruals approach was used by Healy (1985), who studied managerial accounting decisions and assumed that managers managed earnings to increase their compensation. Healy (1985) examines earnings management by comparing the

mean of total accruals across the sample corporations separated into three groups, conditional on the earnings management direction. DeAnglo (1986) specifies total accruals as the aggregate of discretionary and non-discretionary accruals. Dechow and Sloan (1991) developed the industry model to detect earnings management. Jones (1991) studies earnings management in U. S corporations during import relief investigations by the U.S International Trade Commission (ITC). Moreover, Jones separates discretionary accruals from non-discretionary accruals; this approach has been used by several studies such as Dechow et al. (1995), Becker et al. (1998), Teoh et al. (1998a, b), Guidry et al. (1999), Bartov et al. (2001), Larcker and Richardson (2004), Peasnell et al. (2005), Kothari et al. (2005). This approach is the most common technique used to detect earnings management. Moreover, Dechow and Dichev (2002) present a model that facades on the quality of working capital accruals and earnings.

2. DETECTING EARNINGS MANAGEMENT

Measuring discretion over earnings is an essential element of any test for earnings management (McNichols, 2000). The accruals-based approach is commonly utilised to detect signals of earnings management activity (Healy, 1985; Jones, 1991; Dechow et al., 1995). This study follows the common technique used to detect earnings management, which uses discretionary accruals as a proxy to measure earnings management (Healy, 1985; De Angelo, 1986; Jones, 1991; Dechow et al., 1995; Becker et al., 1998; Teoh et al., 1998a and b; Guidry et al., 1999; Bartov et al., 2001; Larcker & Richardson, 2004; Peasnell et al., 2005; Kothari et al., 2005). Total accruals (TA) are divided into discretionary accruals (DA) and non-discretionary accruals (NDA) components. Discretionary accruals are the difference between actual accruals and expected accruals.

A cross-sectional four different versions of the Modified Jones model (Dechow et al., 1995) were applied to generate firm specific coefficients. From the results of the four versions, this study used firm specific coefficients that were generated from the version with the highest adjusted R^2 to estimate the expected nondiscretionary accruals, which was Modified Jones model included the cash flow from operation (CFO) and performance matching on return on assets (ROA) among the regression. Dechow et al. (1995) stated that discretionary accruals are likely to be misspecified for companies with extreme levels of performance. Moreover, Dechow (1994) stated that cash flow is helpful in determining the expected accruals and it should be included in future studies. Also, Larcker and Richardson (2004) added operating cash flows to the Modified Jones model to reduce measurement error. Kothari et al. (2005) included performance matching on return on assets in the current year or the prior year (ROA_{it} or ROA_{it-1}), to address the non-linear relationship between normal accruals and performance. The version can be shown as follows:

$$TA_{it} / A_{it-1} = \alpha_1(1 / A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_{it} / A_{it-1}) + \beta_3(CFO_{it} / A_{it-1}) + \beta_3(ROA_{it} / A_{it-1}) + \varepsilon_{it}$$

$$CA_{it} / A_{it-1} = \alpha_1(1 / A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(CFO_{it} / A_{it-1}) + \beta_3(ROA_{it} / A_{it-1}) + \varepsilon_{it}$$

where: TA_{it} total accruals of corporation (i),

CA_{it} current accruals,

ΔREC_{it} net receivable in years t less net receivables in year $t-1$,

ΔREV_{it} revenues in year t less revenues in year $t-1$,

PPE_{it} gross property plant and equipment in year t

A_{it-1} total assets at ($t-1$),

CFO_{it} operating cash flows (CFO_{it} Income before extraordinary items- TA_{it}),

ROA_{it} is income before extraordinary items for year (t) over (A_{it}), and

$\alpha_0, \beta_1, \beta_2, \beta_3$ = firm-specific parameters.

The results of the correlation analysis show that the problem of multicollinearity is not found in relation to all independent variables.

The Libyan environment is different from developed countries because of several reasons, such as: firstly, the extensive presence of state-owned and family-owned companies, and a small number of listed companies because of the fact that Libyan capital market was established in 2007. Therefore, this study examines the existence and direction of earnings management in the unlisted companies of state-owned and private companies. This approach was applied because it is the most common technique used to detect earnings management, and the data required for using this model are available in the Libyan environment. The sample size was 87 companies over four years. The sample size was 87 financial statements of Libyan unlisted companies that

are 45 state-owned and 42 private companies, which includes data over three years from 2007 to 2009. Applying this sample leads to a total number of observations of 261 company-years.

Moreover, this study follows Teoh et al. (1998a and b), who decomposed total accruals (TA) into current and long-term components, and evaluated them separately because companies have more discretion over current accruals (CA), which include adjustments of short-term assets and liabilities that support the day-to-day operations, than over long-term accruals (LTA), which include adjustments of long-term net assets that can be increased by adjusting depreciation, decreasing deferred taxes or realising unusual gains.

In addition, following Subramanyam, (1996), Teoh et al. (1998a), Bartov et al. (2001), Chung et al. (2002), Koh (2003), Balsam et al. (2003), Chen et al. (2005) and Jones et al. (2008) this study used a cross-sectional approach rather than the time-series approach. This was because of three main reasons. Firstly, the cross-sectional model generates a larger sample and a higher number of observations. Secondly, the time-series model requires around ten years of data for each company to estimate the regression coefficients and therefore introduces misspecification due to non-stationarity; also, in this study it is difficult to obtain such data. Finally, the time-series approach may lower the effectiveness of tests (i.e. Type II error) due to overlapping estimation and treatment periods. Therefore, this study used cross-sectional models. Also, this study followed the view of Bartov et al. (2001) and Ronen and Yaari (2007), who consider the standard deviations of the parameters much lower in the cross-sectional regression. Moreover, this study used a balance-sheet approach to compute total and current accruals because some of the Libyan companies do not prepare cash flow statements.

Several empirical studies have examined motivations that are behind practicing earnings management. Their results showed that earnings management might be exercised for several motivations, which depend on the aims that want to be reached. These motivations lead to practicing earnings management in two directions, which are income-increasing and income-decreasing. Income-increasing occurs with motivations, such as increasing management compensation (Healy, 1985; Watts & Zimmerman, 1986; Gaver et al., 1995; Holthausen et al., 1995; Guidry et al., 1999), external contract requirements (Watts & Zimmerman, 1986; Duke & Hunk, 1990; Defond, 1994; Sweeney, 1994; Jaggi & Lee, 2002), job anxiety (Fudenberg & Tirol, 1995; DeFond & Park, 1997), capital market motivations (Dechow & Skinner, 2000), reaching analysts' consensus forecasts (Burgstahler & Dichev, 1997; DeGeorge et al., 1999; Payne & Robb, 2000; Burgstahler & Eames, 2006), and initial public offerings (IPOs) (Teoh et al., 1998 b; DuCharme et al., 2004).

On the other hand, income-decreasing occurs with the motivations, such as decreasing the value of tax payment (Baralexis, 2004; Noronha et al., 2008), when the debts are renegotiated or restructuring takes place because waivers are denied (Jaggi & Lee, 2002), when the company is targeted by political procedures with unfavourable consequences (Cahan, 1997), and during import relief, monopolistic practices, sudden product price increases (Jones, 1991; Cahan, 1992; Han & Wang, 1998), bonus contracts (Healy, 1985) and during CEO changes (Strong & Meyer, 1987; Elliott & Shaw, 1988; Pourciau, 1993; Wells, 2002).

The motivations presented above can be considered the main causes for exercising earnings management. Corporations are working in different environments with different variables, which may affect the existence and the direction of earnings management. Accordion to Noronha et al. (2008), the issue which should be considered is how managers consider the importance of the motivations. As a result, managers will have different priorities on motivations. The authors also present two factors that influence motivation preference, which are corporation ownership structure and corporation size.

Corporation ownership structure, as stated by Wang (2006), has an important influence on reported earnings and information value. The monitoring mechanism that a corporation uses is influenced by ownership structure, including monitoring earnings management activity (Siregar & Utarna, 2008). Hao (1999) mentioned that the non-tradable characteristic of state-owned enterprise shares is the basic reason for the low quality of earnings data. Noronha et al. (2008), moreover, state that, because managers in state-owned corporations are government officials, corporate earnings attainment is one of their promotion criteria. Therefore, managers may have the motivation to increase earnings. However, Siregar and Utama (2008), in their examination of the relationship between earnings management on the one hand and ownership structure and firm size on the other, provided evidence that family ownership has an effect on the selection of a particular kind of earnings management. With reference to corporation size, Moses (1987) provided evidence that earnings management is associated with a corporation's size. Baralexis (2004) in his study of Greek corporations found that large corporations in Greece have different motivations to small corporations. Reducing income tax considerations is very important for small corporations. However, large corporations managed earnings to demand external financing. Zhu and Su (2002) found that Chinese medium- and small-sized corporations have motivations to practice earnings management for tax expense and managers' compensation. As a result of the above discussion, this particular study investigated the effect of the nature of company ownership and company size.

3. EXISTENCE OF EARNINGS MANAGEMENT IN THE LIBYAN COMPANIES

As mentioned before, Modified Jones model included the cash flow from operation (CFO) and performance matching on return on assets (ROA) among the regression has the highest mean adjusted R^2 . Therefore, this model was applied to investigate the existence and the direction of earnings management in the unlisted companies (state-owned and private companies) in Libya. The table (1) shows that approximately 42%, 56% and 47% of the sample companies were adopting income-increasing policies in years 2007, 2008 and 2009, respectively.

4. DIRECTION OF EARNINGS MANAGEMENT IN THE LIBYAN COMPANIES

In an attempt to obtain more explanation of the direction of earnings management in the Libyan companies (state-owned and private companies), the decision was taken to divide the whole sample into two sub-samples regarding the nature of company ownership, which are state-owned companies and private companies. Then, the direction of earnings management was examined by a regression model on the basis of company size.

Table (1): Descriptive statistics results for discretionary total accruals and discretionary current accruals for all the companies of the sample.

Accruals level for all the sample	2007	2008	2009
Panel A: Discretionary total accruals (DTA): $TA_{it} / A_{it-1} = \alpha_1(1 / A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(PPE_{it} / A_{it-1}) + \beta_3(CFO_{it} / A_{it-1}) + \beta_4(ROA_{it}) + \varepsilon_{it}$			
Mean	-0.0081	0.0221	-0.0063
Median	-0.0146	-0.0134	-0.0115
Minimum	-1.0842	-1.1032	-0.6554
Maximum	1.5337	4.2003	0.6604
% Positive	47%	47%	46%
Number of observations	87	87	87
Panel B: Discretionary current accruals (DCA): $CA_{it} / A_{it-1} = \alpha_1(1 / A_{it-1}) + \beta_1(\Delta REV_{it} - \Delta REC_{it} / A_{it-1}) + \beta_2(CFO_{it} / A_{it-1}) + \beta_3(ROA_{it}) + \varepsilon_{it}$			
Mean	0.01776	0.1191	0.0067
Median	-0.0245	0.0281	-0.0148
Minimum	-1.0574	-0.7835	-0.6005
Maximum	1.5073	2.3862	0.6177
% Positive	42%	56%	47%
Number of observations	87	87	87

4.1 THE NATURE OF COMPANIES' OWNERSHIP

Table (2) presents the relationship between the direction of earnings management and ownership nature. It can be noticed that 71%, 75%, and 69% of state-owned companies were adopting income-increasing policies accruals in years 2007, 2008 and 2009, respectively. Also, it can be seen that 78%, 83%, and 78% of the companies that engaged in earnings management by using income-increasing policies accruals in years 2007, 2008 and 2009, respectively, were state-owned companies. Furthermore, it can be seen from Table (2) that 79% , 83% and 70% of private companies were adopting income-decreasing policies accruals in years 2007, 2008 and 2009, respectively. Moreover, it can be seen that 72%, 76%, and 70% of the companies that engaged in earnings management by using income-decreasing policies accruals in years 2007, 2008 and 2009, respectively, were private companies.

Table (2): the relationship between the direction of earnings management and ownership nature

Panel A: Discretionary total accruals (DTA) for state-owned companies						
	2007		2008		2009	
	Income-increasing	Income-decreasing	Income-increasing	Income-decreasing	Income-increasing	Income-decreasing
1- (%) of state-owned companies	71%	29%	75%	25%	69%	31%
Number of observations	45		45		45	
2- (%) of the direction of EM*	78%	28%	83%	24%	78%	30%
Number of observations	32	13	34	11	31	14
Panel B: Discretionary total accruals (DTA) for private companies						
	Year 1		Year 2		Year 3	
	Income-increasing	Income-decreasing	Income-increasing	Income-decreasing	Income-increasing	Income-decreasing

1- (%) of private companies	21%	79%	17%	83%	21%	70%
Number of observations	42		42		42	
2- (%) of the direction of EM*	22%	72%	17%	76%	22%	70%
Number of observations	9	33	7	35	9	33

* The direction of earnings management is income-increasing or income-decreasing.

4.2 COMPANY SIZE

To investigate whether there is a relationship between the direction of earnings management and company size, two regression models (one for state-owned companies and another for private companies) were applied as follows:

$$DTA_{it} = \alpha + \beta \ln(A_{it}) + \varepsilon_i$$

where: DTA_{it} company total accruals (i),

A_{it-1} company total assets at ($t-1$), and

$\ln(A_{it})$ company size as measured by natural logarithm of total assets.

As can be seen from Table (3) in panel A (state-owned company), F-value (19.462) was significant at the one percent level, which suggests that the regression model was statistically valid. The table also shows that company size was positively and significantly associated with discretionary total accruals (DTA) ($\beta = 0.007$, $p < 1\%$). This means that as company size increases, the company adopts income-increasing policies accruals. In addition in panel B (private company) that F-value (11.038) was significant at the one percent level, which indicates that the regression model was statistically valid. The table also shows that company size was negatively and significantly linked to discretionary total accruals (DTA) ($\beta = -0.009$, $p < 1\%$). This means that as company size increases, the company adopts income-decreasing policies accruals. To sum up, from the above discussion, one can recognise that there are linkages between the direction of earnings management and both ownership nature and company size.

Table (3): the result from regression model to investigate the relationship between the direction of earnings management and company size

The regression model: $DTA_{it} = \alpha + \beta \ln(A_{it}) + \varepsilon_i$		
Panel A: state-owned company		
variable	Coefficient β	t-value
α	0.007	0.374
$\ln(A_{it})$	0.007	4.412 ***
R Square=7% F=19.462 Prop (F statistic) = 0.000		
Panel B: private company		
variable	Coefficient β	t-value
α	0.006	0.198
$\ln(A_{it})$	-0.009	-3.322 ***
R Square=4% F=11.038 Prop (F statistic) = 0.001		

5. CONCLUSIONS

The results of this study showed that Libyan companies are engaged in earnings management by using both income-increasing and income-decreasing policies accruals. In order to investigate the direction of earnings management, the whole sample was divided into two sub-samples regarding the nature of ownership (state-owned and private companies). The results showed that the majority of the companies that adopted income-increasing policies accruals were state-owned companies. However, the majority of the companies that adopted income-decreasing policies accruals were from the private companies group. In addition, there is a relationship between the direction of earnings management and company size, which was measured by using two regression models (one for state-owned companies and another for private companies). The results of the regression model of state-owned companies showed that company size was positively and significantly associated with discretionary total accruals.

This means that as company size increases, the company adopts income-increasing policies accruals. On the other hand, the results of the regression model of private companies showed company size was negatively and significantly linked to discretionary total accruals. This means that as company size increases, the company adopts income-decreasing policies accruals.

REFERENCES

- Balsam, S., Bartov., E. & Marquardt, C. (2002). Accruals management, investor sophistication, and equity valuation: Evidence from 10-Q filings. *Journal of Accounting Research*, 40(4),987-1012.
- Baralexis, S. (2004). Creative accounting in small advancing countries. The Greek case. *Managerial Auditing Journal*, 19(3),440-461.
- Bartov, E., Gul, F. A., & Tsui, J. (2001). Discretionary-accruals models and audit qualifications. *Journal of Accounting and Economics*, 30(3),421-452.
- Becker, C. L., Defond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary Accounting Research*, 15(1), 1-24.
- Beneish, M. D. (1997). Detecting GAAP violation: Implications for assessing earnings management among firms with extreme financial performance. *Journal of Accounting and Public Policy*, 16(3),271-309.
- Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24(1),99-126.
- Burgstahler, D., & Eames, M. (2006). Management of earnings and analysts' forecasts to achieve zero and small positive earnings surprises. *Journal of Business Finance & Accounting*, 33(5-6),633-652.
- Cahan, S. F. (1992). The effect of antitrust investigations on discretionary accruals: A refined test of the political cost hypothesis. *The Accounting Review*, 67, 77-95.
- Cahan, S. F., Chavis, B. M., & Elmendorf, R. G. (1997). Earnings management of chemical firms in response to political costs from environmental legislation. *Journal of Accounting, Auditing & Finance*, 12(1),37-65.
- Chen, K. Y., Lin, K. L., & Zhou, J. (2005). Audit quality and earnings management for Taiwan IPO firms. *Managerial Auditing Journal*, 20(1), 86-104.
- Chung, R., Firth, M., & Kim, J. (2002). Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance*, 8(1),29-48.
- DeAngelo, L. E. (1986). Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders. *The Accounting Review*, 61(3), 400-420.
- Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77, 35-59.
- Dechow, P. M., & Skinner, D. J. (2000). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons*, J 4(2), 235-250.
- Dechow, P. M., & Sloan, R. G. (1991). Executive incentives and the horizon problem: An empirical investigation. *Journal of Accounting and Economics*, J 4, 51-89.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193-225.
- DeFond, M. L., & Jiambalvo, J. (1994). Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics*, J 7, 145-176.
- DeFond, M. L., & Park, C. W. (1997). Smoothing Income in Anticipation of Future Earnings. *Journal of Accounting and Economics*, 23, 115-139.
- DeGeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings management to exceed thresholds. *Journal of Business*, 72(1), 1-33.
- DuChanne, L. L., Malatesta, P. H., & Sefcik, S. E. (2004). Earnings management, stock issues, and shareholder lawsuits. *Journal of Financial Economics*. 71(1), 27-49.
- Duke, I. C. & Hunt, H. G. (1990). An empirical examination of debt covenant restrictions and accounting-related debt proxies. *Journal of Accounting and Economics*. J 2.45-63.
- Dye, R. (1988). Earnings management in an overlapping generations model. *Journal of Accounting Research*. 26(2), 195-235.
- Elliott, J. A., & Shaw, W. H. (1988). Write-Offs as accounting procedures to manage perceptions. *Journal of Accounting Research* 33(2), 231-261.
- Fudenberg, D. & Tirole, J. (1995). A theory of income and dividend smoothing based on incumbency rents. *Journal of Political Economy*, 103(1), 75-93.
- Gaver, J. J., Gaver, K. M., & Austin, J. R. (1995). Additional evidence on bonus plans and income management. *Journal of Accounting and Economics*, 19(1), 3 -28.
- Goncharov, I. (2005). *Earnings management and Its Determinants: Closing Gaps in Empirical Accounting Research*: Peter Lang GmbH.
- Guidry, F., Leone, A. J., & Rock, S. (1999). Earnings-based bonus plans and earnings management by business-unit managers. *Journal of Accounting and Economics* 26(1-3), 113-142.
- Han, J. C., & Wang, S. (1998). Political costs and earnings management of oil companies during the 1990 Persian Gulf Crisis. *The Accounting Review*, 73(1), 103-118.
- Hao, J. (1999). Economic analysis on the adverse effect of the non-trading characteristics of state-owned shares. *Research on Financial and Economic Issues*. 2.
- Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*. 7(1-3),85-107.
- Healy, P. M., & Wahlen, I. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365-383.

- Holthausen, R. W., Larcker, D. F., & Sloan, R. G. (1995). Annual bonus schemes and the manipulation of earnings. *Journal of Accounting and Economics*, 19(1), 29-74.
- Jaggi, B., & Lee, P. (2002). Earnings management response to debt covenant violation and debt restructuring. *Journal of Accounting, Auditing, and Finance*, 17(4), 295-324.
- Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228.
- Jones, K. L., Krishnan, G. V., & Melendrez, K. D. (2008). Do models of discretionary accruals detect actual cases of fraudulent and restated earnings? An empirical analysis. *Contemporary Accounting Research*, 25(2), 499-531.
- Koh, P. S. (2003). On the association between institutional ownership and aggressive corporate earnings management in Australia. *The British Accounting Review*, 35, 105-128.
- Kothari, S. P., Leone, A. J., & Wasley, C. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163-197.
- Lambert, R. (1984). Income smoothing as rational equilibrium behavior. *The Accounting Review*, 59(4), 604-618.
- Larcker, D. E., & Richardson, S. A. (2004). Fees paid to audit firms, accrual choices, and corporate governance. *Journal of Accounting Research*, 42(3), 625-656.
- Leuz, C., Nandab, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69(3), 505-527.
- Marquardt, C. A., & Wiedman, C. I. (2004). How are earnings managed? An examination of specific accruals. *Contemporary Accounting Research*, 21 (2), 461-489.
- McNichols, M., & Wilson, G. P. (1988). Evidence of earnings management from the provision for bad debts. *Journal of Accounting Research*, 26(3), 1-31.
- McNichols, M. F. (2000). Research design issues in earnings management studies. *Journal of Accounting and Public Policy*, 19 (4-5), 313-345.
- McNichols, M. F. (2002). Discussion of 'The quality of accruals and earnings: The role of accrual estimation errors'. *The Accounting Review*, 77, 61-69.
- Moses, D. O. (1987). Income smoothing and incentives: Empirical using accounting changes. *The Accounting Review*, 62(2), 259-377.
- Noronha, C., Zeng, Y., & Vinten, G. (2008). Earnings management in China: an exploratory study. *Managerial Auditing Journal*, 23(4), 367-385.
- Payne, J., & Robb, S. (2000). Earnings management: The effect of ex-ante earnings expectations. *Journal of Accounting, Auditing and Finance*, 15(4), 371-392.
- Peasnell, K. V., Pope, P. F., & Young, S. E. (2005). Board monitoring and earnings management: Do outside directors influence abnormal accruals? *Journal of Business Finance and Accounting*, 32(7-8), 1131-1346.
- Petroni, K. R. (1992). Optimistic reporting in the property casualty insurance industry. *Journal of Accounting and Economics*, 15(4), 485-508.
- Pourciau, U. (1993). Earnings management and non-routine executive changes. *Journal of Accounting and Economics* 16(1-3), 317-336.
- Ronen, J., & Yaari, V. (2007). *Earnings Management: Emerging Insights in Theory, Practice, and Research*: Springer.
- Ronen, T., Ronen, J., & Yaari, V. L. (2003). The effect of voluntary disclosure and pre-emptive preannouncements on earnings response coefficients (ERC) when firms manage earnings. *Journal of Accounting, Auditing and Finance*, 18(3), 379-410.
- Schipper, K., & Vincent, L. (2003). Earnings quality. *Accounting Horizons*, 17, 97- 110.
- Siregar, S., & 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, 1-27.
- Teoh, S. H., Welch, I., & Wong, T. J. (1998a). Earnings management and the long-run market performance of initial public offerings. *The Journal of Finance*, 53(6), 1935-1974.
- Teoh, S. H., Welch, I., & Wong, T. J. (1998b). Earnings management and the underperformance of seasoned equity offerings. *Journal of Financial Economics*, 50, 63-99.
- Wang, D. (2006). Founding family ownership and earnings quality. *Journal of Accounting and Research*, 44, 619-655.
- Watts, R. L., & Zimmerman, J. L. (1986). *Accounting Theory*. New Jersey: Prentice-Hall.
- Wells, P. (2002). Earnings management surrounding CEO changes. *Journal Accounting and Finance*, 42(2), 169-193.
- Zhu, L. H., & Su, Z. (2002). Earnings management in small and medium sized firms. *China Economic and Trade Herald*, 18.