

# Do Companies in Gulf Cooperation Council (GCC) Countries Manage their Earnings?

Bahaaedin Alareeni<sup>1</sup>

## Abstract

This study considers data for listed companies in GCC countries with an objective to determine if companies practice Earnings Management (EM). The study sample consists of 332 listed companies during the period from 2010 to 2015. The EM level was measured using discretionary accruals (DA) calculated using the Modified Jones (1995) Model. The results reveal that companies in GCC countries are engaged in EM practices except for Oman. Further, the companies in most GCC countries practice EM through income-decreasing discretionary accruals. Therefore, the results of this study provide empirical support for the development of new regulations and amendments and necessary corrective decisions regarding the effectiveness of applying corporate governance codes in GCC countries. More specifically, this study reveals an urgent need for new amendments to restrict EM practices in GCC countries. In addition, the study enriches the EM literature by covering GCC countries, which has not been sufficiently examined in relation to this topic.

**Keywords:** Earnings Management, Discretionary Accruals, the Modified Jones (1995) Model, GCC Countries.

---

<sup>1</sup> Bahaaeddin Alareeni. [alareeni@metu.edu.tr](mailto:alareeni@metu.edu.tr) Prof. Alareeni is Assistant Professor of Accounting and Auditing (Middle East Technical University Northern Cyprus Campus).



## **1. Introduction**

Managers of the firm always try to secure the funds required in all possible ways to maintain firms' going concern. This may drive to manipulate firms' earnings to create more positive picture of firms' performance (Türegün, 2016). This also enables managers to realize their benefits, maximize their utility, and maintain their power or job security (Jiraporn et al. 2008). Thus, the EM is used to influence the accounting profits by using some of the flexibility allowed by accounting policies and practices (Parfet, 2000).

However, managers significantly practice EM in different methods, hence producing misrepresentations in financial reports. EM practicing methods can be classified (Gul et al. 2009) into positive discretionary accruals (income-increasing) and negative discretionary accruals (income-decreasing). This is based on the assumption that firms' earnings are used by financial statements users as a proxy in capital markets to evaluate companies' financial position (Türegün, 2016).

There are number of studies that evidence strong incentives for EM. For example, Kahneman and Tversky, (1979) support that largest incentives to manage earnings occur while moving from relative or absolute loss to gain. Carslaw (1988) and Thomas (1989) found that firms practice discretion to increase earnings when the level of earnings per share is slightly below a round number, though neither paper provides specific evidence for earnings near zero. In addition, Burgstahler and Dichev (1997) analyzed the impact of firm's losses on EM and concluded that large and small firms manage their profits in order to avoid small losses or decline in small profits. This view was also supported by other researchers as Hayan (1995), Degeorge et al. (1999), Gore et al. (2001), Beatty et al. (2002), Roychowdhury (2006), Myers et al., (2007), Hamdi and Zarai (2012), and Llukani (2013) indicate that firms manipulate earnings to avoid small losses or decrease in earnings. Coppens and Peek (2005) reported also that when the tax regulations strongly affect financial accounting, firms do not try to avoid reporting small losses. In addition, when the tax regulation is weak, the firms engage in EM to avoid reporting losses.

Based on these facts, the doubt increased on the truth and fairness of financial statements and whether they involve changes associated with EM practices and behavior to affect earnings and show it violation of reality.

In GCC countries<sup>2</sup>, managers are likely to practice EM opportunistically to maximize their own benefits rather than the stakeholders' benefits. Thus, this study determines whether listed companies in GCC countries practice EM as a method to hide their low performance and to mislead financial statements users. To the best of our knowledge, there has been very limited number of studies that dealt with this vital topic in GCC countries. In more detail, this study shows whether firms are practicing management of positive discretionary accruals (income-increasing) or management of negative discretionary accruals (income - decreasing). In addition, the previous studies that measured the EM practices were done only in one country of GCC but not in entire GCC countries (e.g., Habbash and Alghamdi, 2016). Thus, the study broadens the scope with a wide coverage of the entire GCC countries based on recent data extracted from Bloomberg database for GCC countries, for six years (2010-2015). The statistical analysis was performed for each country separately to get more robust and accurate results. GCC countries were selected as they started experiencing economic difficulties because of decrease in the oil prices. Thus, this could affect firms' financial performance and motivates firms to practice EM. Therefore, it is significant for many end users to detect the level of EM practices in these countries as any manipulation of the firms' performance in the GCC countries could affect the entire Arab region. Therefore, result of this study is useful for many parties as auditors, banks, credit institutions, and financial statement users in general. Further, it helps government in setting rules and procedures to protect the interest of shareholders.

The rest of the paper is organized as follows. Section 2 presents the research design. Section 3 analyses the study results. Section 4 presents the study's conclusion, limitations and the scope for further research.

---

<sup>2</sup>Gulf Cooperation Council (GCC), is a union consisting of six Arab Gulf States (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates).

## 2. Research design

### 2.1 Methodology

Previous studies reported that the Modified Jones(1995) Model is the best measurement of discretionary accruals and the most common model as a proxy of earnings management(Dechow et al.,1995; Francis et al., 1999; Saleh and Ahmed, 2005; Gore et al., 2007; Uwuigbe et al., 2012; Atieh and Hussain, 2012; Walker, 2013; Alareeni and Aljuaidi, 2014; Uwuigbe et al., 2014; Ipino and Parbonetti, 2016). Therefore, this study uses the Modified Jones (1995) Model to calculate the discretionary accruals as a proxy of earnings management and to decide whether companies practice Earnings Management (EM). Thus, the research methodology involves estimating values of DA for each firm based on the Modified Jones (1995) Model. This analysis is applied to all the GCC countries.

The Modified Jones (1995) Model is based on the following equation:

$$\frac{TA_t}{A_{t-1}} = \beta_1 \left( \frac{1}{A_{t-1}} \right) + \beta_2 \left( \frac{\Delta REV_t - REC_t}{A_{t-1}} \right) + \beta_3 \left( \frac{\Delta PPE_t}{A_{t-1}} \right) + \epsilon_{j,t} \quad (1)$$

Where:

$TA_t$  (Total accruals) = Accounting Earnings – CFO

$A_{i,t-1}$  = Total asset in year t - 1

$\Delta REV_{i,t}$  = Change in the revenues of company j from year t-1 to year t

$\Delta REC_{i,t}$  = Change in the receivables of company j from year t-1 to year t

$\Delta PPE_{i,t}$  = Fixed asset of company j at the end of year t

$\epsilon_{j,t}$  = Errors of company j in year t

To estimate the parameters ( $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ) of the Modified Jones (1995) Model in equation (1), multiple regression analysis was used. DA was then identified as the difference between estimated accruals and actual accruals. The value of DA was used as a proxy of the degree of EM.

### 2.2 Sample size and data collection

The study sample consists of all listed companies in the GCC countries. The GCC countries include Saudi Arabia, Kuwait, Oman, United Arab Emirates, Bahrain and Qatar. The study sample was collected from the Bloomberg database for the period from 2010 to 2015. It was selected based on the following criteria: (1) Company must be classified as industrial or service

company; (2) Company's data is available for six years. The other sectors like banks, insurance and financial services are excluded as they have different operating characteristics (Carcello and Nagy, 2004) and they possess complex properties that are unique in nature and different from those of other sectors (Al-Thuneibat, et al., 2011). Accordingly, initial sample consists of 332 companies out of 7968 observations. 296 companies' observations are dropped due to missing data on some variables. Therefore, the final sample includes 332 companies with a total of 7672 observations. Table 1 describes the study sample distribution by country:

Sample country	<b>Table 1:</b>		
	distribution by		
	<b>Country</b>	<b># of Companies</b>	<b># of Observations</b>
	<b>Saudi Arabia</b>	120	2712
	<b>United Arab Emirates</b>	51	1180
	<b>Kuwait</b>	113	2664
	<b>Qatar</b>	13	308
	<b>Oman</b>	14	304
	<b>Bahrain</b>	21	504
	<b>Total</b>	<b>332</b>	<b>7672</b>

### 3. The results

Table 2 shows the descriptive analysis of discretionary accrual for the GCC countries included in the study sample. It presents the mean, minimum and maximum values and the standard deviation of discretionary accrual.

The exhibit from the Table 2, Referring to Saudi Arabian companies, the mean value of discretionary accrual value is equal to (-0.721) with minimum (-0.6858), maximum (0.47607) and standard deviation of (0.0809). This indicates that the Saudi firms practiced EM through the negative discretionary accruals (income-decreasing).

**Table 2:** Descriptive Statistics of discretionary accrual for each country

<b>Variables</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std.</b>
<b>Saudi Arabia</b>	-0.6858	0.47607	-0.721	0.0809
<b>Kuwait</b>	-0.3832	0.46022	-0.911	0.07974
<b>United Arab Emirates</b>	-0.77637	0.29145	-0.232	0.0840
<b>Oman</b>	-0.13	0.16	0.0000	0.05992
<b>Qatar</b>	-0.19336	0.18140	-0.927	0.0600
<b>Bahrain</b>	-0.5210	0.29297	-0.3986	0.09107

For Kuwait, the companies mean value of discretionary accrual is equal to (-0.911) with a minimum (-0.3832), maximum (0.46022) and standard deviation of (0.07974). This implies that even Kuwaiti companies are involved in EM through the negative discretionary accruals.

In the United Arab Emirates, the companies mean value of discretionary reached to (-0.232) with a minimum (-0.77637), maximum (0.29145) and standard deviation of (0.0840). This indicates that the UAE companies are engaged in EM activities through the reducing income (negative discretionary accruals).

The analysis presents on the average that Qatari and Bahraini companies are also engaged in EM practices through the negative discretionary accruals. The mean value of Qatari companies touched (-0.927) with a minimum (-0.19336), maximum (0.18140) and standard deviation of (0.0600). In Bahrain, the companies mean value of the discretionary accruals reached (-0.3986) with a minimum (-0.5210), maximum (0.29297) and standard deviation of (0.09107).

Finally, the results are different for companies in Oman, their mean value of discretionary accruals of zero with a minimum (-0.13), maximum (0.16) and standard deviation of (0.05992).

This confirms on the average that Omani companies did not practice EM by their management.

In the nutshell, based on the results of descriptive analysis, on an average indicates that the companies in GCC countries (Saudi Arabia, Kuwait, UAE, Bahrain, and Qatar) except for Oman are engaged in downward EM activities. Namely, the companies practice income-decreasing. This could be to reduce stock prices prior to granting stock options and prior to re-purchasing shares from the stock markets. In addition, may avoid some political and social costs that may be incurred by GCC companies as a result of the announcement of a high profit. Furthermore, to avoid any proposed increases by the employees to raise wages and salaries. However, this is not due to reducing the value of tax payments, as most of the companies in GCC countries are not taxable.

#### **4. Conclusion**

The objective of the study is to determine if the listed companies in GCC countries practice EM. The study used DA to measure the EM practices. It examined a sample of 332 listed companies with a total of 7672 observations during the period 2010-2015.

The findings indicate that firms in GCC countries (Saudi Arabia, Kuwait, United Arab Emirates, Bahrain, and Qatar) except for Oman are engaged in EM practices and they are practicing downward EM activities. This may be to avoid some political and social costs or to avoid any proposed increase by the employees to raise wages and salaries. Regarding Oman, the result showed that Omani companies did not practice EM.

The limitation of this study is missing of some financial data. Some observations were deleted, as their data was not provided by Bloomberg database. Furthermore, as reported by Turegun (2016) the capability of the Modified Jones (1995) Model is still open to discuss on whether it is accurate in classifying discretionary and non-discretionary accruals. Thus, the validity of this study results rely on the accuracy and correctness of DA as a suitable proxy for EM.

Further research could be conducted using financial firms and banks and insurance companies since the nature of their financial data is different. Further research also could include other firms' characteristic as firm age, governance indicators etc. Thus, future research is suggested to further examine this research problem using the reported suggestions.

## References

- Alareeni, B., & Aljuaidi, O., 2014. The modified Jones and Yoon models in detecting earnings management in Palestine Exchange (PEX). *International Journal of Innovation and Applied Studies*, 9(4), 1472.
- Alareeni, B. and Branson, J., 2013. Predicting Listed Companies' Failure in Jordan Using Altman Models: A Case Study. *International Journal of Business and Management*, 8(1), p.113.
- Alareeni, B.A., 2019. The associations between audit firm attributes and audit quality-specific indicators. *Managerial Auditing Journal*.
- Alareeni, B., 2018. Does corporate governance influence earnings management in listed companies in Bahrain Bourse?. *Journal of Asia Business Studies*.
- Awadh, M. and Alareeni, B., 2018. Measuring Level of Voluntary Disclosures of Banks Listed in Bahrain Bourse. *J Account Mark*, 7(295), p.2.
- Alareeni, B., 2018. The impact of firm-specific characteristics on earnings management: evidence from GCC countries. *International Journal of Managerial and Financial Accounting*, 10(2), pp.85-104.
- Al-Thuneibat, A. A., Issa, R. T. I. A., & Baker, R. A. A., 2011. Do audit tenure and firm size contribute to audit quality? Empirical evidence from Jordan. *Managerial Auditing Journal*, 26(4), 317-334.
- Atieh, A., & Hussain, S., 2012. Do UK firms manage earnings to meet dividend thresholds?. *Accounting and Business Research*, 42(1), 77-94.
- Beatty, A. L., Ke, B., & Petroni, K. R., 2002. Earnings management to avoid earnings declines across publicly and privately held banks. *The Accounting Review*, 77(3), 547-570.
- Burgstahler, D., & Dichev, I., 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24(1), 99-126.
- Carcello, J. V., & Nagy, A. L., 2004. Client size, auditor specialization and fraudulent financial reporting. *Managerial Auditing Journal*, 19(5), 651-668.
- Carslaw, C. A., 1988. Anomalies in income numbers: Evidence of goal oriented behavior. *Accounting Review*, 321-327.
- Coppens, L., & Peek, E., 2005. An analysis of earnings management by European private firms. *Journal of International Accounting, Auditing and Taxation*, 14(1), 1-17.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P., 1995. Detecting earnings management. *Accounting Review*, 193-225.
- DeGeorge, F., Patel, J., & Zeckhauser, R., 1999. Earnings management to exceed thresholds. *The Journal of Business*, 72(1), 1-33.
- Francis, J. R., Maydew, E. L., & Sparks, H. C., 1999. The role of Big 6 auditors in the credible reporting of accruals. *Auditing: A Journal of Practice & Theory*, 18(2), 17-34.
- Gore, P., Pope, P. F., & Singh, A. K., 2007. Earnings management and the distribution of earnings relative to targets: UK evidence. *Accounting and Business Research*, 37(2), 123-149.
- Gore, P., Pope, P., & Singh, A., 2001. Discretionary accruals and the distribution of earnings relative to targets. WP, Lancaster University, January version.

- Gul, F. A., Fung, S. Y. K., & Jaggi, B., 2009. Earnings quality: Some evidence on the role of auditor tenure and auditors' industry expertise. *Journal of Accounting and Economics*, 47(3), 265-287.
- Habbash, M., & Alghamdi, S., 2016. Audit quality and earnings management in less developed economies: the case of Saudi Arabia. *Journal of Management & Governance*, 1-23.
- Hamdi, F. M., & Zarai, M. A., 2012. Earnings management to avoid earnings decreases and losses: empirical evidence from Islamic banking industry. *Research Journal of Finance and Accounting*, 3(3), 88-107.
- Hayan, C., 1995. The information content of losses. *Journal of Accounting and Economics* 20, 125-153.
- Ipino, E., & Parbonetti, A., 2016. Mandatory IFRS adoption: the trade-off between accrual-based and real earnings management. *Accounting and Business Research*, 1-31.
- Jiraporn, P., Miller, G. A., Yoon, S. S., & Kim, Y. S., 2008. Is earnings management opportunistic or beneficial? An agency theory perspective. *International Review of Financial Analysis*, 17(3), 622-634.
- Kahneman, D., & Tversky, A., 1979. Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the econometric society*, 263-291.
- Llukani, T., 2013. Earnings management and firm size: an empirical analyze in Albanian market. *European Scientific Journal*, 9(16).
- Myers, J. N., Myers, L. A., & Skinner, D. J., 2007. Earnings momentum and earnings management. *Journal of Accounting, Auditing & Finance*, 22(2), 249-284.
- Parfet, W. U., 2000. Accounting subjectivity and earnings management: A preparer perspective. *Accounting Horizons*, 14(4), 481-488.
- Roychowdhury, S., 2006. Earnings management through real activities manipulation. *Journal of accounting and economics*, 42(3), 335-370.
- Saleh, N. M., & Ahmed, K., 2005. Earnings management of distressed firms during debt renegotiation. *Accounting and Business Research*, 35(1), 69-86.
- Thomas, J. K., 1989. Unusual patterns in reported earnings. *Accounting Review*, 773-787.
- Türegün, N., 2016. Effects of borrowing costs, firm size, and characteristics of board of directors on earnings management types: a study at Borsa Istanbul. *Asia-Pacific Journal of Accounting & Economics*, 1-15.
- Uwuigbe, O., T.O. Fagbemi and U.F. Anusiem, 2012. The effects of audit committee and ownership structure on income smoothening in Nigeria. *Research Journal of Finance and Accounting*, 3(4): 26-33.
- Uwuigbe, U., Ranti, U. O., & Sunday, D. P., 2014. Corporate governance and capital structure: evidence from listed firms in Nigeria stock exchange. *Advances in Management*, 7(2), 44.
- Walker, M., 2013. How far can we trust earnings numbers? What research tells us about earnings management. *Accounting and Business Research*, 43(4), 445-481.