FIRM PERFORMANCE AND EARNINGS MANAGEMENT

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ABSTRACT

This study examines whether firms with low performance are more engaged in earnings management practices than firms with high performance in an emerging market; namely, Egypt. We estimate a model of the relationship between earnings and cash flows from operations with a dummy variable that allows parameter shifts for cash flows of low performance firms. Thus, the model captures whether the strength of the relationship between earnings and cash flows differs between low and high performance firms.

The results show that, compared to firms with high performance, firms with low performance have smaller regression coefficient of earnings on cash flows. These results can be interpreted as indicating that low performance firms engage in more earnings management (increase their earnings management practices) than high performance firms. Overall, these results suggest that firm performance is a critical determinant of earnings management. Given the current weakness of shareholder protection and regulatory enforcement in Egypt, these results encourage policymakers to improve considerably corporate-governance mechanisms in Egypt. This study contributes not only to the limited research on earnings management in the emerging market of Egypt, but also in other emerging economics.

Keywords Firm Performance, Earnings Management, Earnings, Cash Flows.

INTRODUCTION

Earnings management occurs when managers within organisations use accounting methods and techniques to present a distorted number of their company's earnings (Beneish, 2001). Several researchers, including Dechow & Skinner (2000), have demonstrated that the self-interested modification of earnings undermines the quality of earnings, as well as the degree to which financial reports are credible. Furthermore, according to Sevin & Schroeder (2005), opportunistic earnings management serves the interests of managers at the expense of stakeholders. This is because the inaccurate earnings reported by managers inform the investment and lending decisions made by key personnel inside and outside the organisation.

The negative effects of earnings management have come to the forefront multiple times in recent years. For example, as noted by Yoon et al. (2006), the 2001 Enron bankruptcy was clearly a result of earnings management, and this is also true for the 2002 Xerox and WorldCom scandals. An important issue to recognise with these scandals is that due to the highly-consequential effect that earnings management practices had on the organisations' operations, the perceived credibility of financial reporting fell significantly in response. It is significant to note that the US Securities and Exchange Commission (SEC) undertook an investigation which verified the companies' engagement in earnings management in the WorldCom and Enron cases, thereby raising global awareness for the issue of earnings management.

The process of earnings management involves the intentional manipulation of accounting accruals by firm managers, the aim being to modify reported earnings (Davidson et al., 1987). In almost all cases, this process is facilitated by capitalising on accounting decisions made within the Generally Accepted Accounting Principles (GAAP). According to Roychowdhury (2006), the following are examples in which the manipulation of accounting accruals can take place: firstly, by implementing specific accounting strategies (bases) in an opportunistic way; secondly, by making insufficient provisions for uncollectible accounts expense; and finally, by delaying asset write-offs. As noted by Ewert & Wagenhofer (2005), earnings management can also involve the intentional implementation of poor operating decisions, specifically those relating to the scale and timing of structuring business transactions through the manipulation of real activities.

In the US-based studies conducted by Roychowdhury (2006) and Zang (2012), the researchers investigated real activities manipulations and the compromises that managers make between accrual-based earnings management and real activities manipulations, respectively. Additionally, the study conducted by Gunny (2010), also conducted in the US, examined the relationship between real activities manipulations and firm performance. The fact should also not be overlooked that the prevalence of real activities manipulations is informed by the surrounding legal and regulatory environment (e.g., whether the country's laws offer protections for investors). Several studies have examined this issue, including the topic of whether accrual-based earnings management can be replaced by real activities manipulations (Enomoto et al., 2015; Braam et al., 2015; Ipino & Parbonetti, 2017).

Although earnings management has been explored by multiple researchers in the literature, almost all research projects have focused on developed stock markets as the research setting. Hence, few findings are directly applicable to the context of developing economies. Furthermore, it is also worth noting that among the existing research projects focusing on developed economies, including the US and the UK, most have taken as their subject the relationship between specific events or incentives, and earnings management. These incentives or events include, for example, the aim of maximizing of management compensations, inflating equity offer prices, safeguarding against the violation of debt agreements, and ensuring that anti-trust regulations are satisfied (Healy, 1985; DeAngelo, 1986; Jones, 1991; Cahan, 1992; Defond & Jiambalvo, 1994; Teoh et al., 1998).

This study examines earnings management in the emerging market of Egypt. In contrast to most previous studies conducted in developed countries (e.g., the US & the UK), and due to data limitations in the Egyptian market, we do not examine earnings management under a specific event or incentive. We examine, instead, earnings management based on the whole performances of the firms by testing whether firms with low/poor performance engage in earnings management practices more than firms with high performance. We argue that, compared to high performing firms, low performing firms make stronger use of earnings management to hide their poor performance. The rationale for focusing on earnings management with respect to the firm performance stems from the fact that this issue has only been touched on briefly in the literature (for the motivation of this study within the Egyptian context, see below**).**

Cash flows from operations are used to indicate the level of a firm's performance. The study's sample was categorized into two sub-samples: firstly, a negative cash flows sub-sample, representing low performing firms; and secondly, a positive cash flows sub-sample, representing high performing firms. Earnings management is measured by discretionary accruals. However, discretionary accruals are inherently difficult to estimate accurately. Therefore, we focus instead

on the relation between earnings and cash flows from operations because cash flows can provide adequate information about the quality of a firm's earnings. In particular, to test whether low performance firms are more prone to manage earnings than high performance firms, we employ the regression analysis of the relation between earnings and cash flows from operations which examines whether the strength of the relationship between cash flows and earnings differs between low and high performance firms. If low performance firms are more engaged in earnings management than high performance firms, the relationship between cash flows and earnings will be weaker in firms with low performance compared with firms with high performance. Specifically, the regression analysis examines the regression coefficients obtained from regression of earnings on cash flows from operations, change in revenues and a dummy variable for cash flows from operations (where dummy variable = 1 for negative cash flows observations and 0 for positive cash flows observations). If low performing firms are more engaged in earnings management strategies than their higher performing counterparts, we would expect to find a smaller slope coefficient of cash flows variable in these firms with low performance compared with their higher-performing counterparts.

According to this study's results, underperforming companies tend to have a smaller regression coefficient of earnings on cash flows when compared to high-performing companies. That is to say, earnings management is more prevalent in underperforming companies than it is in high-performing companies. One way to account for this finding is by suggesting that the pressures which typically incentivize high-performing companies to manage their earnings downward (such as the desire to avoid taxes or to limit political costs) are not a feature of the privatised public Egyptian organisations that represent a large percentage of the sample firms in this study. Additionally, it is worth recognising that these results could also be due to that underperforming companies often experience pressures that increase their likelihood of hiding poor performance through upward earnings management. With the weaknesses of the regulatory landscape in Egypt, these findings indicate that the country's corporate governance code should be reformed.

BACKGROUND AND THE EGYPTIAN CONTEXT

Arthur Levitt (1998), former Chair of the US Securities and Exchange Commission (SEC), outlined five earnings-management techniques: namely, (1) "big bath" charges, (2) "cookie jar" reserves, (3) improper revenue recognition, (4) abusing the materiality concept and (5) creative acquisition accounting. He described these techniques as poisoning the process of financial reporting. Motivations for earnings management arise from income smoothing, contractual agreements, capital markets considerations and regulatory concerns (or political costs issues) (Healy & Wahlen, 1999; Dechow & Skinner, 2000; Yoon & Miller, 2002).

The institutional environment in Egypt is marked by the following features: firstly, a capital market that plays a minimal role in raising capital (Moore, 1995); secondly, weak corporate governance (relying on motivating organisations to operate transparently and responsibly) (Bremer & Ellias, 2007), paired with a low level of adherence to the Egyptian Accounting Standards' disclosure regulations (Abdelsalam & Weetman, 2007); and thirdly, an inadequate regulatory environment with minimal compliance monitoring controls, particularly for accounting standards and corporate punishments (Ebaid, 2012). Significantly, these characteristics of Egyptian accounting information reflect the underlying fact that Egyptian firms tend to report poorly on local accounting information. This is especially noteworthy, even in view of the requirement for companies to adopt high-quality accounting standards (IFRS). The

key point to note about this institutional environment is the way in which it has created opportunities for managers to engage in earnings management, an issue which is prevalent throughout Egyptian firms (Kamel & Elbanna, 2010). The important consideration is the distinctiveness of the Egyptian institutional context when compared to other research settings, thus necessitating the publication of research findings specific to this Egyptian setting.

RESEARCH QUESTION AND HYPOTHESIS

Prior studies examined whether earnings management is connected to specific events or incentives. Examples of such events and incentives include maximizing of management compensations, raising the prices of equity offers, avoiding violating debt covenants, and avoiding anti-trust violations (e.g., Healy, 1985; DeAngelo, 1986; Jones, 1991; Cahan, 1992; Defond & Jiambalvo, 1994; Teoh et al., 1998). An important difference between the present study and previous literature is that the research setting for this project, namely, Egyptian firms, is associated with limited access to data. Therefore, while studies addressing the developed economies have taken as their subject the relationship between specific events or incentives and earnings management, this study addresses the association between earnings management and the entire performance of the Egyptian firms. As such, this study examines whether firms with low/poor performance are assumed to have more incentives to manage earnings compared to firms with high performance. To be more precise, this study seeks to illuminate the research question (RQ) given below:

RQ: Do firms with low performance engage in earnings management practices more than their higher-performing counterparts?

Generally, when the performance is low, the firms tend to adopt income-increasing strategies, i.e., they manage earnings upward. However, when the performance is high, the firms tend to adopt income-decreasing strategies, i.e., they manage earnings downward. Thus, low performing firms are taking earning-increasing strategies to hide their low performance (e.g., for maximizing of management compensations and inflating stock prices), and high performing firms are taking income-decreasing strategies to shift income from good years to bad years, or to reduce taxes, or to avoid political costs. However and given the different environmental characteristics of the emerging market of Egypt, presented above, the circumstances that create such incentives to reduce earnings deliberately by high performing firms are not much addressed in the current study that examines earnings management in the Egyptian context. This is because a large percentage of our sample firms is privatized public firms in which there is considerable state ownership; and thus managers of these privatized public firms are inclined to use accruals opportunistically to bias earnings upwards (not downwards) in order to get higher compensation and to boost their firm's stock prices, especially when firm performance is low. Thus, managers of underperforming firms are more inclined to employ income-increasing policies very heavily to opportunistically bias earnings upwards, but managers of high performing firms are not inclined to employ income-decreasing policies. This suggests that, in Egypt, earnings management is more pervasive in underperforming firms than in their higher performing counterparts.

While discretionary accruals have frequently been used in the literature to measure earnings management, discretionary accruals can be difficult to estimate. However, earnings and cash flows from operations are used as a proxy for firm performance. Thus, when earnings have not been managed upwards or downwards, cash flows from operations and earnings will be strongly and positively correlated. Furthermore, cash flows from operations can function as a

check with respect to the quality of earnings, which stems from the fact that they are the cash-basis counterpart to accrual earnings (specifically, that are not impacted by accounting accrual and deferrals). The quality of earnings can be considered high if cash flows from operations and earnings are correlated in a strong and positive way, i.e., a lesser degree of earnings management; while the likelihood of a greater degree of earnings management having taken place within firms tend to increase when cash flows from operations and earnings are weakly correlated. Therefore, the study relies on investigating whether the cash flows from operations and earnings in underperforming and high-performing firms are strongly or weakly correlated, thereby indicating which is more likely to have participated in earnings management.

With these considerations in mind, regressing earnings on cash flows represents an effective way to gain insight into the relationship between earnings and cash flows. Cash flows from operations are assumed to have a positive impact on earnings because the former are the "cash basis net income" whereas the latter are the "accrual basis net income" (Yoon et al., 2001; Yoon & Miller, 2002). Under the null hypothesis of no earnings management, we should not observe any significant difference in the slope of cash flows variable between the low and high performance firms. However, if low performance firms manage earnings, earnings will be less affected by cash flows. Therefore, we expect to find a smaller slope of cash flows variable in the low performance firms compared with high performance firms if these low performance firms are engaged in greater earnings management. As argued before, underperforming firms participate in earnings management at a greater rate than high-performing firms to conceal their poor performance. Therefore, the following hypothesis (*H1*) is established to guide the present study's investigation of the *RQ*:

> *H1: Firms with low performance have significantly smaller coefficient for regression of earnings on cash flows from operations than their higher-performing counterparts.*

RESEARCH METHODOLOGY

Measuring Firm Performance

Cash flows from operations were used to represent the firm performance (McNichols & Wilson, 1988; Givoly & Hayn, 2000; Barth et al., 2001; Yoon & Miller, 2002) and, consistent with the literature, the following three assumptions were made about the cash flows variable: firstly, that cash flows from operations cannot be modified easily; secondly, that cash flows from operations are relatively objective; and thirdly, that no transitory components are included in cash flows from operations, with the main exceptions being when intentional front-loading or deferment of cash accompanying expenses or revenues are present. To distinguish between low and high performing firms, the data set was categorised into two sub-samples: positive cash flows sub-sample and negative cash flows sub-sample. When cash flows from operations are positive for a company, this company was classified into the high-performing category, while negative cash flows from operations meant that a company was classified into the underperforming category. Additionally, lagged total assets were used to deflate cash flows from operations.

Regression Analysis-Testing Research Hypothesis

Regression analysis was used to test the above-stated hypothesis. We employ the regression analysis that examines the relation of earnings on cash flows from operations, change

in revenues, and a slope dummy for cash flows from operations variable. The purpose of the slope dummy is to identify disparities in the coefficients of cash flows from operations between the two groups of firms. For underperforming and high-performing companies, the dummy variables were 1 and 0, respectively. Hence, to test the above-stated hypothesis, we examine the statistical significance of the slope coefficient for the dummy variable. We borrow this model from Yoon et al. (2001). Following Yoon et al. (2001), we operationalize the regression model in the following way:

$$E_{it} = \alpha_0 + \alpha_1 CF_{it} + \alpha_2 \Delta REV_{it} + \alpha_3 D_{it} \times CF_{it} + \varepsilon_{it}$$

Where E_{it} is earnings for firm *i* in year *t*. CF_{it} is cash flows from operations for firm *i* in year *t* and ΔREV_{it} is change in revenues for firm *i* in year *t*. Earnings, cash flows and change in revenues are deflated by total assets at the beginning of year *t*. D_{it} is dummy (indicator) variable (1, 0) to determine the low and high performance, respectively.

In the above model, we hypothesise a negative and significant value for α_3 (where α_3 represents the difference in the slope of cash flows variable between the low and high performance firms). A significant and negative value for α_3 suggests that cash flows will have considerably smaller effect on earnings for low performance than for high performance. As shown before, this means that the low performance firms manage earnings more heavily than high performance firms.

DATA ANALYSIS

The variables of the study are defined as follows.

1. Earnings: this variable refers to the net income prior to preferred and common dividends (but following operating and non-operating income and expenses, provisions, extraordinary items, taxes, and minority interest) which is available to stockholders.
2. Cash flows: these constitute the net cash flows from the operating activities in which the firm is engaged, inclusive of net cash receipts as well as disbursements.
3. Total accruals: this variable refers to the firm's total earnings minus its cash flows from operations.
4. Revenues: this variable denotes a firm's overall sales (along with additional operating revenue) minus discounts, allowances, and returns (i.e., net sales).
5. Total assets: this variable represents a firm's total current assets, including advance payments of fixed assets (or investments), long-term investments, goodwill, net property plant, and equipment and other assets.

The data of this study is obtained from Egypt for Information Dissemination (EGID) from 2008 to 2014. EGID is as a private and fully owned subsidiary of the Egyptian Stock Exchange. It provides its users with the main Egyptian financial information and Egyptian stock market data of the listed Egyptian firms. The study sample includes listed Egyptian firms that were included in the EGX 30 Index from 2003 to 2009. The EGX 30 is a price index that is often used for monitoring the Egyptian capital market's performance and includes the most active and leading top thirty listed Egyptian firms. We identify 72 distinct firms. The sample derived from the initial 72-firm group was established in reference to the inclusion and exclusion criteria given below:

1. Firms must issue financial statements using the Egyptian pound (L.E.).
2. Firms in the financial industry are excluded.
3. Firms are excluded in the event that accounting information is unavailable for a minimum of one year over the period from 2008-2014.

Using these three criteria, we reduced the sample size to 52 firms. Table 1 shows the initial sample size of the study.

Table 1
INITIAL SAMPLE OF THE STUDY FOR LISTED EGYPTIAN FIRMS THAT WERE INCLUDED IN THE EGX 30 INDEX OVER THE PERIOD FROM 2003 TO 2009

	Number of firms
Initial sample	72
Less	
1- Firms presenting their financial statements in currency other than Egyptian pound (L.E.)	-3
2- Financial firms	-12
3- Firms without accounting data through entire period 2008-2014	-5
Sample size before excluding firms with insufficient data to calculate the study variables	52

Data pertaining to those 52 firms was gathered for the 2008 to 2014 period, but the study begins with 2009 because we use change in revenues in the regression analysis. Consequently, 312 firm-year observations were identified for the 2009-2014 period. After removing missing observations (specifically, 17 firm-year observations) and eliminating 17 firm-year observations because they rose higher than and lower than 99% and 1%, respectively, of the variables' distribution, the final study sample was constituted of 278 firm-year observations. Hence, the 52-firm sample over the period from 2009-2014 included 278 firm-year observations.

RESULTS

Descriptive Statistics

We categorize the 278 firm-year observations (over the period 2009-2014) into one of two sub-samples: either the negative cash flows sub-sample or the positive cash flows sub-sample. Table 2 gives an overview of the descriptive statistics regarding cash flows from operations and earnings for the negative cash flows sub-sample (50 observations, 18%) and the positive cash flows sub-sample (228 observations, 82%), along with the overall sample (278 observations, 100%).

For the entire sample, compared to earnings, cash flows' mean is larger. Thus, the value of total accruals, on average, is negative. Further, compared to standard deviation of cash flows, standard deviation of earnings is lower. This is expected because managers use accruals to even out the cash flows' variations throughout years.

The mean and median values for earnings are greater than those of cash flows for the negative cash flows sub-sample firms, which contrast with the observation that cash flows are associated with greater mean and median values than earnings for the positive cash flows sub-sample firms. Hence, it is possible to conclude that firms in the negative cash flows sub-sample, averagely speaking, displayed a positive value for total accruals, contrasting with the negative value for total accruals associated with the positive cash flows sub-sample. Total accruals' positive value in low performance firms indicate that firms with low performance are increasing earnings compared to firms with high performance, whereas total accruals' negative value in high performance firms can be expected as there are generally negative total accruals in industrial firms (a further potential explanation for these results to be found in summary and conclusion section, below).

Given that high performing firms do not have incentives (or have fewer incentives) to manage earnings downward, as discussed above, in further analysis, mean and median difference tests show that mean and median total accruals are positive and significantly greater at the 0.0000 level in underperforming firms than they are in high performing firms (t-statistic for the difference between means and Wilcoxon z-statistic for the difference between medians, respectively). This finding reveals that underperforming firms are more likely than their high performing counterparts to apply income-increasing strategies. Managers in underperforming firms are motivated to manage earnings upward in the event that their compensations are connected to earnings. When earnings do not exceed the required level, especially in the case of underperforming firms, a strong incentive exists to increase earnings. Moreover, given the close relationship between stock prices and earnings performance, managers within low performing firms are motivated to engage in income-increasing activities, if they want to increase the firm's stock price.

Table 2
DESCRIPTIVE STATISTICS OF THE VARIABLES

	Entire sample			**Negative cash flows sub-sample**			**Positive cash flows sub-sample**		
	Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
Earnings	0.104	0.083	0.101	0.051	0.031	0.088	0.123	0.098	0.101
Cash flows from operations	0.119	0.087	0.143	-0.051	-0.031	0.049	0.157	0.114	0.131
Total accruals	-0.015	-0.016	0.105	0.102	0.075	0.116	-0.035	-0.028	0.087

Notes

a. Earnings, cash flows from operations, and total accruals are scaled by total assets at the start of year *t*.
b. The number of firm-year observations for a sample of 52 Egyptian firms over 6 year periods (2009 to 2014) for entire sample, negative cash flows sub-sample and positive cash flows sub-sample is as follows respectively: 278, 50 and 228.

Regression Analysis Results

Table 3 reports the regression results. The coefficient of cash flows for the positive cash flows sub-sample (α_1) is 0.553 (t= 14.214). The value of 0.553 is significantly positive at the 0.0000 level. This result shows that cash flows from operations for high performing firms are positively associated with earnings in a statistically significant way. This means that cash flows will affect earnings significantly when performance is high. This is consistent with our argument of no (or a lesser degree of) earnings management when performance is high and hence, earnings should have a significant positive relation with cash flows.

The coefficient of cash flows for the negative cash flows sub-sample ($\alpha_1+\alpha_3$) is -0.442 (t = -3.357). The value of -0.442 is significantly negative at the 0.0003 level. This result shows that cash flows from operations for low performing firms are negatively associated with earnings. This means that earnings are inversely affected by cash flows when performance is low. This is consistent with our argument of existence of a greater degree of earnings management when performance is low and hence, earnings will not have a significant positive relation with cash flows.

The difference in the slope of cash flows as we move from the positive cash flows sub-sample (with slope α_1) to the negative cash flows sub-sample [the slope being ($\alpha_1+\alpha_3$)] is -0.995 (α_3) (t = -7.217). The value of -0.995 is significantly negative at 0.0000 level. This result shows

that the difference in the slope of cash flows between the low and high performance firms (between the negative and positive cash flows sub-samples) is significantly negative. This means that the association between cash flows and earnings for low performing firms is significantly smaller than that for high performing firms. Thus, as argued before, firms with low performance are engaged in greater earnings management compared to firms with high performance.

In addition, the coefficient of change in revenues (α_2) is 0.100 (t= 5.718). The value of 0.100 is significantly positive at the 0.0000 level. This result shows that change in revenues is positively associated with earnings.

As robustness check, an alternative method for distinguishing between low and high performing firms was employed, the data set was categorised into two sub-samples: the first sub-sample is characterized by low cash flows (demonstrating low performance, i.e. underperforming firms); and the second sub-sample is characterized by high cash flows (demonstrating high performance, i.e. high performing firms). Each sub-sample contains a relatively similar number of firms, and to create each sub-sample, all firm-year observations of the full sample are arranged in ascending order based on cash flows from operations scaled by lagged total assets. Firms in the low cash flows sub-sample are associated with firm-years for which cash flows magnitude is limited (the firms in the highest group), while the converse is true for firms in the high cash flows sub-sample. The results have not changed and were identical to those generated by utilising the negative and positive cash flows sub-samples for the identification of low and high performing firms.

The above results provide strong support for our research hypothesis. Hence, the evidence in Table 3 supports the hypothesis that firms with low performance have significantly smaller coefficient for regression of earnings on cash flows from operations than their higher-performing counterparts.

In summary, the above results indicate that the regression coefficient of earnings with cash flows from operations varied between underperforming and high-performing companies. Specifically, high-performing companies were associated with a greater regression coefficient than their underperforming counterparts. In view of this, it is reasonable to conclude that for the sample group of Egyptian companies, underperforming companies participated in earnings management more frequently than high-performing companies (for the implications of these results, see next section, below).

Table 3
REGRESSION RESULTS OF EARNINGS WITH CASH FLOWS AND CHANGE IN REVENUES

$$E_{it} = \alpha_0 + \alpha_1 CF_{it} + \alpha_2 \Delta REV_{it} + \alpha_3 D_{it} \times CF_{it} + \varepsilon_{it}$$

Coefficients (*t*-statistics & *P*-values)

	α0	α1	α2	α3	Sum of (α1+α3)	Adj.R2
	0.023	0.553	0.100	-0.995	-0.442	0.561
T-stat	5.986	14.214	5.718	-7.217	-3.457	
P-value	0.0000	0.0000	0.000	0.0000	0.0003	

Notes

a. E_{it} is earnings, CF_{it} is cash flows from operations and ΔREV_{it} is the change in revenues for firm *i* in year *t*. These variables are scaled by total assets at the start of year *t*.

b. D_{it} is dummy (indicator) variable for cash flows variable (1, 0) to determine low and high performance, respectively. The negative cash flows sub-sample represents firms with low performance, whereas the positive cash flows sub-sample represents firms with high performance, as defined in methodology section.

c. The sample size is 278 of firm year observations for a sample of 52 Egyptian firms over 6 year periods from 2009 to 2014.
d. White cross-section method is employed to control for the potential effects of heteroskedastic and autocorrelation in the errors.
e. T-stat is the T-statistic along with P-value (one-tailed test) of the corresponding estimation.
f. α_1 is the estimated coefficient of cash flows of high performance firms.
g. $(\alpha_1+\alpha_3)$ combines the estimated coefficient of cash flows of low performance firms.
h. α_3 is the difference in the estimated coefficients of cash flows between low and high performance firms.

DISCUSSION AND CONCLUSION

The purpose of this research project was to investigate the phenomenon of earnings management in Egyptian companies. Having explored whether underperforming firms are characterised by a greater likelihood of participating in earnings management than their high-performing counterparts, the study demonstrated that this is true. As such, it is reasonable to conclude that, in the Egyptian context, engagement in earnings management is more prevalent among underperforming companies. In terms of the interpretations of this result, it is worth noting at the outset that high-performing firms sometimes have incentives to engage in downward earnings management (e.g., to bypass taxes or mitigate political costs). Nevertheless, given that a substantial number of companies in this study's sample group were privatised public companies, it is reasonable to suggest that incentives of this kind did not exist within the high-performing companies. Therefore, the likelihood is low that the high-performing firms in this study substantially reduced their earnings. Note worthily, these accords with Noronha et al.'s (2008) results, which relate to the Chinese context. Contrastingly, underperforming Egyptian companies are strongly incentivised to manage their earnings upward, the purpose being to self-interestedly inflate stock prices or alter the company's pay structure. Hence, for stakeholders who utilise Egyptian companies' financial reports, these results demonstrate that they should always be cautious about the prevalence of self-interested earnings management activities, which are used to hide poor performance. Altogether, the study suggests that Egyptian lawmakers should initiate governance reform within the country. This is especially crucial in view of the country's minimal investor safeguards and its poor approach to enforcing the law. These initiatives can be expected to improve the degree to which Egyptian companies' financial statements are reliable and transparent, thereby shielding minority shareholders from adverse consequences, and increasing the level of investment. In terms of future research, it would be worthwhile to follow the lead established by researchers focusing on the developed economies, namely, by examining a particular incentive and analysing the relationship between discretionary accruals and this incentive. However, such research can only be conducted if the necessary data becomes available.

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