

The Pricing of the Real Earnings Management Evidence from Malaysian Stock Exchange*

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ملخص:

هدفت هذه الدراسة إلى اختبار مدى استخدام إدارة الأرباح الحقيقية في الشركات المدرجة في سوق كوالالمبور للأوراق المالية، وفيما إذا كان ذلك الاستخدام ذا محتوى معلوماتي أو استغلالي من وجهة نظر السوق المالي. ولتحقيق أهداف الدراسة، استخدمت عينة من الشركات الصناعية المدرجة في السوق المالي للفترة من ٢٠٠٢ - ٢٠١٠.

ومما هو جدير بالذكر أن الدراسة قد نُفذت على مرحلتين: في المرحلة الأولى قيست إدارة الأرباح الحقيقية باستخدام نموذج (Roychordhury, 2006)، حيث أُستخدم النموذج لتقدير المستوى الطبيعي من الخصم على الأسعار والمصاريف الخاضعة لسيطرة الإدارة وتكاليف الإنتاج، ثم قدرت إدارة الأرباح الحقيقية بالفرق بين المستوى المتوقع وبين المستوى الفعلي لتلك المؤشرات. أما في المرحلة الثانية فقد أُستخدمت نماذج الانحدار والتحليل البسيط والمتعدد لاختبار فرضيات الدراسة.

وقد توصلت الدراسة إلى أن إدارة الشركات الماليزية تستخدم تقنيات إدارة الأرباح الحقيقية للتأثير على أرقام الربح، وتضليل المستثمرين، حيث قدمت نتائج الدراسة دليلاً واضحاً على الاستخدام الاستغلالي لإدارة الأرباح الحقيقية للتلاعب بالأرباح المحاسبية. ولكن فيما يتعلق برؤية السوق المالي لإدارة الأرباح الحقيقية، فقد بينت الدراسة أن المتعاملين في السوق المالي لا يدركون الاستخدام الاستغلالي لإدارة الأرباح، وأنهم يعتمدون بشكل كبير على أرقام الأرباح المحاسبية النهائية.

Abstract:

This study investigates the usage of real earnings management in the listed companies in the Malaysian stock market and whether this usage is informative or opportunistic from the capital market perspective. We used Roychowdhury model (2006) to estimate three measures of REM namely; price discounts, discretionary expenses, and manufacturing cost. By using a sample of the manufacturing industries for the period from 2002 – 2010, we found evidence about the opportunistic use of the REM to affect the accounting earnings. But, regarding the capital market perspective, we found that the investors are unaware of the REM and they are misled by such practices because they rely heavily on the fixed number of earnings. Thus, the findings of the study provide evidence about the managers' tendency to use REM techniques opportunistically, but the market is unable to evaluate such practices correctly.

Keywords: Real Earnings Management; Accounting Earnings Management; Opportunistic; Informative; Accounting Earnings; Agency theory.

I. Introduction:

In recent years, accounting earnings and their quality have become a well-researched area due to their importance in interpreting the changes in stock prices (Ball & Brawn, 1968). It is agreed that stock price is the mirror of the firm's financial situation. Many researchers in the last part of the previous century and the early years of this century studied more deeply earnings' quality and earnings' management, where they found that managers have many incentives to use their judgment to affect the accounting earnings, including management compensation (Healey, 1985; Pourciau 1993; Gaver et al. 1995; Bergstresser and Philippon, 2005), avoiding debt-covenant (Press & Weintrop 1990; Sweeney 1994, Iatridis and Kadorinis, 2009), meeting and beating earnings' benchmarks (Burgstahler & Dichev 1997; Barth et al., 1999; Lin et al., 2006), and reducing regulatory or political costs (Jones 1991; Key 1997; Han & Wang 1998).

Earnings management occurs when managers use their 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 practices (Healy & Wahlen, 1999, 371). Many scholars argue that managerial intervention in the reporting process can occur not only via accounting estimates and methods, but also through operational decisions, which can ultimately change or modify the influence of the financial reporting on stock prices or returns. Hence, it gives a large signal to the stakeholder on the achievement status of the firm's financial position.

After the collapse of Enron and WorldCom, and the issuance of the Sarbanes-Oxley act (SOX, July 30, 2002), the interest in this (operating decision) trend of research about earnings management has increased rapidly. The new trend investigated the managers' tendency to use operation decisions instead of using accounting earnings to manage earnings (AEM). This tendency of using the real economic events (operation decisions) is known as real earnings management (REM). Such actions affect cash flows and in some cases accruals. Studies that directly examine earnings management through real activities have concentrated mostly on investment activities, such as reductions in expenditures on research and development (e.g. Dechow & Sloan, 1991; Gunny, 2009).

(REM) can be considered as the tendency of managers to make the operational decision with respect to some special interest for management or for the firm, such as making a decision of reducing prices at the end of the year to increase sales to beat the analysis forecast. Roychowdhury (2006, 338) defines (REM) as departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals that have been met in the normal course of operations. These departures do not necessarily contribute to firm value even though they enable managers to meet reporting goals.

In fact, managing earnings through the economic events (REM) is not a new practice, it has been known before, but the obstacles in using (AEM) lead to renaissance the use of (REM). This field of research has been investigated by some researchers such as (Bader et al., 1991; Dechow & Sloan, 1991; Bushe, 1998), but as it is mentioned above, managers tend to use (REM) extensively especially in the end of the financial year after 2002 (Cohen, et. al., 2008, 810). This study will continue the work of the previous researchers by investigating how Kuala Lumpur Stock Exchange prices this kind of earnings management.

Under the agency theory, EM can be interpreted by one of the following two scenarios; firstly, managers use such practices to achieve their own interest and will not reflect the real financial situation in the firm (Healy & Wahlen, 1999, 372), furthermore, will influence the firm's long-term value severely (Roychowdhury, 2006; Zhang, 2010; Cohen & Zarwin, 2010), under the efficient market hypothesis the external parties will price such practices negatively through the stock return of the firm (Sloan, 1996, 292). ⁽¹⁾

Secondly, they use these practices to deliver some private information to the outsiders to give a signal about the future performance of the firm (Healy & Wahlen, 1999, 370). So managers used EM to enhance the firm value, and based on the signal hypothesis the outsiders will price such practices positively through the stock returns (Subramaniam, 1996; Alqerm & Abdeljalil, 2008).

In a previous study, the researchers found that Malaysian managers' tendency toward using accounting earnings' management practices is less than Singapore or Canadian managers. They attribute this tendency for cultural

(1) Under the semi strong form in the EMH all available information will be reflected in the share prices. So, opportunistic EM, negatively related to future operating performance, will be priced negatively.

reasons (Roubi and Richardson, 1998, 461). In this study, we will investigate if the Malaysian managers use real decisions to influence the earnings, and if so how the Malaysian market evaluates such practices?

This study contributes to the earnings management literature in examining the REM from the market's or outsiders' perspective. Most of the previous studies investigate REM practices from managerial incentive perspective or contractual perspective, but there is very little evidence about the market insight for the EM practices. In addition, it is one of the first studies to examine the REM, upon the researcher's knowledge, in the Malaysian market. However, this study constitutes a small part from my PhD thesis about the effect of the firm life cycle on earnings' management.

This study deploys (Roychowdhury, 2006, 346-347) model to estimate the normal level of the most common practices of REM, which are; operating cash flow, cost of production, and discretionary expenses. Then the study estimates the REM for each aspect of them as the difference between the actual and normal level for each practice. Hence, consistent with previous literature (e.g. Roychowdhury, 2006; Zhang, 2006; Cohen et al, 2008) the researchers argue that the existence of the difference between the real and the expected level is an evidence for the EM practices. In the second stage, the study examines the relationship between the REM and the stock return to have evidence about the effect of the REM on stock returns.

To investigate the informative or opportunistic use of the REM by managers, the study examines the association between REM and the first and second year operating performance (Subramaniam, 1996, 268; Gunney, 2009, 867). The researchers expect a positive association between REM and future operating performance if the managers' usage of REM was informative, and a negative relation for the opportunistic usage.

The study used a sample of all the manufacturing firms in eight sectors that are listed in the main screen in Kuala Lumpur stock exchange during the period from 2002 – 2010.

The remainder of the paper is organized as follows; section two includes a literature review. In the third section we discuss the hypotheses' development; in the 4th section the data and methodology of the paper will be detailed. The fifth section analyzes and discusses the results. And in the sixth section the researchers summarize and conclude the paper.

II. Literature Review:

Earnings' management has been studied widely during the last three decades in order to have better understanding of manager's incentives and procedures to achieve their goals, and to deter the potential consequences of them as well. However, earnings' management literature can be classified into two perspectives; informative and opportunistic perspectives. Both perspectives can be viewed either from a contract perspective or a financial reporting perspective. From a contracting perspective, earnings' management can be used as a low-cost way of protecting the firm from the consequences of unforeseen state realizations in the presence of rigid and incomplete contracts, while from a financial reporting perspective; managers may use their discretion to influence the market value of the firm. Hence, under this approach managers use their judgment to improve and enhance the firm's value.

However, some managers may use earnings' management to achieve special goals. From a contracting perspective, they may use EM opportunistically to benefit themselves at the expense of the firm. In addition, from a financial reporting perspective, they may record excessive write offs, or emphasize earnings' constructs other than net income. Scott (2003, 326) argued that managers by using such tactics do not fully accept securities' market efficiency and reduce the reliability of financial reporting. Regardless of the approach that scholars used to investigate earnings management, there are two trends for managing earnings; accounting earnings management (AEM) and real earnings management (REM). We will focus in this study on the REM.

The real earnings' management relies on real economic events instead of accruals. Some researchers refer to this type as earnings' management through operating decisions. REM can be defined as managing the operational activities to reduce or to increase the normal level of those operation practices. Besides it is similar to accounting earnings' management that it can be either opportunistic or informative. Although some practices, such as price discounts and reduction of discretionary expenditures, are possibly optimal actions in certain economic circumstances (Roychowdhury, 2006, 337), it can be opportunistic if managers used them widely to achieve special goals like beating earnings target.

Notably, scholars' interest about this stream of earnings' management has increased extremely since the beginning of this century due to the financial crisis for many big firms and the issuance of Sarbanes-Oxley Act (2002). There are some studies which examined this trend such as (Dechow and Sloan 1991; Baber, Fairfield and Hagar 1991; Bushee 1998; Rochowdhury 2006; Cohen, Dey and Lys 2007; Zang 2006).

However, still there is a little systematic evidence on management of real activities other than R&D reduction. In Graham, Harvey and Rajgopal's (2005) survey, a larger number of respondents admitted to reducing discretionary expenditures and/or capital investments rather than engaging in other manipulation methods. Rochowdhury (2006) on the other hand, documented that managers use real earnings management to avoid reporting annual losses or to meet analyst forecast by price discounts, over production and reduction of discretionary expenditures. *The followings are the related studies about the coincidence usage of the different techniques of the REM:*

1. Executive incentives and the horizon problem, (Dechow and Sloan,1991)

Dechow and Sloan (1991) can be considered as one of the first studies on earnings management through operating decisions, when they showed that managers in their final years in office CEOs reduce research and development spending, presumably to increase reported earnings. As a result, it can be concluded that some managers use REM to increase bonus awards or to increase their job security. Baber, Fairfield and Hagar (1991) and Bushee (1998) also find evidence consistent with reduction of R&D expenditures to meet earnings benchmarks. While, Bartov (1993) proved that managers use other practices to achieve their goals when he argued that firms with negative earnings changes report higher profits from asset sales.

2. The Relation between earnings management using real activities manipulation and Future Performance, (Gunny, 2005)

By using a sample of 32402 firm-year observations for the period 1988 – 2000, Gunny (2005) examined four types of real earnings management; research and development, SG&A, sell fixed assets and cut prices or over production, and their effects on the subsequent operating performance (earnings and operating cash flow) and also whether investors and analysts expect the subsequent decline in performance. He found that real earnings

management has an economically significant impact on subsequent operating performance, namely, the regression results indicate that all four types of (REM) are associated with lower ROA in the followed year for the event. In addition, there is a negative relation between (REM) and the subsequent year operating cash flow. In other words, he presented evidence about the opportunistic usage of the REM practices.

3. Evidence on the trade-off between real activities manipulation and accrual-based earning management, (Zhang,2006)

On the other hand, Zhang (2006) analyzed the tradeoffs between accrual manipulations and real earnings manipulations. She suggested that decisions to manage earnings through real actions precede decisions to manage earnings through accruals. Moreover, she proved that REM practices have a positive correlation with the costs of AEM, but interestingly, she found that REM and AEM are negatively correlated, and so, she concluded that managers use the two strategies as substitutes.

4. Real and accrual-based earnings management in the pre- and post-sarbanes oxley periods, (Cohen, et. al, 2008)

Cohen and his colleagues (2008) studied the real and accounting earnings management in the pre- and post- Sarbanes Oxley periods, they found that the usage of accrual earnings management has declined after the issue of SOX act in 2002, while the usage of real earnings management has increased after 2002. Thus, their results led them to conclude a substitute relationship between REM and AEM, which is consistent with Zhang's findings.

5. On The Relation between real earnings management and accounting earnings management: Income smoothing perspective, (Matsuura, 2008)

Matsuura (2008) investigated the relation between real earnings management and accounting earnings management to smooth earnings. The result of the examination proved that managers use real earnings management and/or accounting earnings management to smooth earnings. Moreover, he found that the relation between real and accounting earnings management is complementary, which is contrary with the previous finding in (Zang, 2006; and Cohen, Dey, and Lys, 2007). However, Matsuura findings suggest that managers use techniques from the two types of EM to influence the earnings without attract the attention of the investors, regulators, and auditors.

6. Accrual-based and real Earnings management activities around seasoned Equity Offerings, (Cohen and Zarowin, 2010)

In their study, Cohen and Zarowin examined both REM and AEM activities around seasoned equity offerings (SEOs). The findings proved that SEO firms engage in REM practices, and that the decline in post-SEO performance due to REM is more severe than that due to AEM. They also confirmed Matsuura findings that firms use multiple EM strategies to manipulate earnings.

Most of the studies on real earnings management focused on some practices of operating decisions to achieve some purposes or around special event, but mostly they neglect their effects on stock market and how the outsiders evaluate such practices. In this paper, the researcher will continue the previous researches on REM and contribute to the literature in investigating how the stock market interprets and evaluates such practices.

Furthermore, this study contributes to the literature by comparing between the informative and opportunistic usage of the REM and their influence on stocks prices. Consistent with the previous literature we examined real operational activities to measure real earnings management (Graham et al, 2005; Rochowdhury 2006) where Graham et al expressed:

“... [W]e find strong evidence that managers take real economic actions to Maintain accounting appearances. In particular, 80% of survey participants report that they would decrease discretionary spending on R&D, Advertising, and maintenance to meet an earnings target. More than half (55.3%) state that they would delay starting a new project to meet an earnings target, even if such a delay entailed a small sacrifice in value....”

Hypotheses Development:

Earnings management can be used by managers either opportunistically to achieve their own interests or informatively to enhance shareholders interest (e.g. Subramaniam, 1996; Healy & Wahlen, 1999; Kothari, 2001; Gunny, 2010). So, if managers used REM informatively to convey some information about the future of the firm to the outsiders, the relationship between REM and future performance should be positive. On the other hand, the opportunistic usage of REM should be negatively related, or at least no relation, with future performance. ***Thus, the researcher develops the following hypothesis (in the negative form):***

- **H1: There is no relationship between REM measures and future operating performance**

However, based on the assumption that the stock market is efficient, on the semi strong form ⁽²⁾, all the publicly available information will be reflected on the stock prices (Fama, 1973). Hence, in either way managers used REM to reduce the information asymmetry between them and the external parties or to mislead the outsiders, the market will realize and benefit from this information and price it fairly. The fair or appropriate pricing means that the opportunistic EM is priced negatively, while the informative EM is priced positively. Therefore, in order to examine the fair pricing of the REM in Kuala Lumpur stock exchange the researcher developed the following hypothesis. It is in the negative form.

- **H2: Kuala Lumpur stock exchange does not price real earnings management fairly.**

Data and Methodology:

The sample of the study consists of all listed manufacturing companies in the main screen in Kuala Lumpur stock exchange with available financial data, stock prices, and dividends on Bloomberg database for the period 2002-2010. The service and financial industries excluded from the sample because of their different nature. Thus, the sample consists of eight industrial sectors ⁽³⁾ with 481 firms (2437 observation) for the estimation of the REM measures in all the sectors. However, while the sample size for the REM proxy estimation models is 481 firms, for the stock return and EM together the sample size is 370 firms (1700 observation) only due to the stock prices availability. *The steps to reach the final sample can be summarized as follow:*

(2) Fama (1973) suggests three levels for the efficiency in the stock markets namely; weak form, where the stock prices move randomly over time, Semi strong form, where stock prices reflect all the publicly available information, and Strong form, where the share prices reflect all the information, the public and private information. Most of the evidence from previous study proved that markets are efficient on the semi strong level, while the strong form is identical or optimal and it is not exist in the real markets.

(3) Sectors name's and number of companies in each sector presented at appendix A in the end of the paper.

	<i>No. of firms</i>
The listed manufacturing companies	621
Firms with unavailable financial data	(140)
Final sample for the estimation of REM proxies	481
Firms with unavailable stock prices and dividends	(111)
Final sample to test REM & stock return relationship	370

Real Earnings Management Estimation models:

Consistent with previous literature (Dechow, Kothari and Watts 1998, Roychowdhury, 2006) we measure the real earnings management by the difference between the normal level of the economic events and the actual level. We use, similar to the previous studies, three proxies to measure the economic events namely; operating cash flow, the cost of production, and the discretionary expenses. Ultimately, the error terms of those estimation models will be the proxies for the REM.

We used the models which are developed by Roychowdhury (2006) to estimate the normal level of:

- **Operating cash flow as a linear relationship based on sales and change in sales.**

$$OCF_{it}/TA_{it-1} = \alpha (1/TA_{it-1}) + \beta_1 (Sales_{it}/TA_{it-1}) + \beta_2 (\Delta Sales_{it} / TA_{it-1}) + \mu_{it} \dots (1)$$

Then the abnormal operating cash flow is the difference between the estimated operating cash flow and the real operating cash flow. In other words, the error term in the previous model which represents the abnormal operating cash flow will be used as the first proxy for the REM.

- **The production cost defined as the sum of cost of good sold (COGS) and the change in the inventory. Considering COGS as linear equilibrium of sales. And the change in inventory as linear equilibrium of change in sales:**

$$COGS_{it}/TA_{it-1} = \alpha (1/TA_{it-1}) + \beta_1 (Sales_{it}/TA_{it-1}) + \mu_{it}$$

$$\Delta INV_{it}/TA_{it-1} = \alpha (1/TA_{it-1}) + \beta_1 (\Delta Sales/TA_{it-1}) + \beta_2 (\Delta Sales_{it-1} /TA_{it-1}) + \mu_{it}$$

By adding these two equilibriums together we can have one model to estimate the normal level of production cost as follow:

$$PROD_{it}/TA_{it-1} = \alpha (1/TA_{it-1}) + \beta_1 (Sales/TA_{it-1}) + \beta_2 (\Delta Sales_{it}/TA_{it-1}) + \beta_3 (\Delta Sales_{it-1}/TA_{it-1}) + \mu_{it} \dots \dots \dots (2)$$

Then the abnormal level of production cost (the second proxy for REM) is calculated by the difference between the actual production cost and the estimated normal level.

- **Discretionary expenses** ⁽⁴⁾:

$$DISC EXP_{it}/TA_{it-1} = \alpha (1/TA_{it-1}) + \beta_1 (Sales_{it-1}/TA_{it-1}) + \mu_{it} \dots \dots \dots (3)$$

Similar to the previous estimation models, we calculated the abnormal level of discretionary expenses (the third proxy for REM) as the difference between the actual discretionary expenses and the estimated normal amount from the estimation model.

We aggregate the REM proxies into two measures; REM1 which is consist of abnormal production cost and (-1* abnormal discretionary expenses), REM2 is abnormal OCF

- **The dependent variable**

The stock return calculated for 12 months ended four months after the end of the financial year for each firm of the sample because the Malaysian act impose's on companies to publish their financial statement within four months of the end of the fiscal year, and adding the dividend as follow:

$$R_{it} = (P_{it} - P_{it-1})/P_{it-1} + Div$$

After estimating the real earnings management we examined the first hypothesis by regressing the subsequent years, t+1 and t+2, performance measures, OCF and EBIT, on the REM measures

$$OCF_{psit+1/pit-1} = \alpha_0 + \beta_1 REM1_{psit/Pit-1} + \beta_2 REM2_{psit/Pit-1} + e_{it} \dots \dots \dots (1)$$

$$EBIT_{psit+1/pit-1} = \alpha_0 + \beta_1 REM_{psit/Pit-1} + \beta_2 REM_{psit/Pit-1} + e_{it} \dots \dots \dots (2)$$

(4) Discretionary expenses: research and development expense, and sales general and administrative expenses.

Where :

$OCF_{psit+1/pit-1}$: operating cash flow per share divided by the beginning of the year stock price.

$EBIT_{psit+1/pit-1}$ = operating income per share divided by the beginning of the year share price.

$REM1_{psit/Pit-l}$: the first measure of real earnings management (abnormal DisExp and Prodcost) per share divided by the beginning of the year stock price.

$REM2_{psit/Pit-l}$: the second measure of real earnings management (abnormal OCF) per share divided by the beginning of the year stock price.

Regardless of the informative or opportunistic usage of EM, as we discussed in section 2, all available information should be reflected in stock prices or returns. Therefore, to test our second hypothesis we use the following multivariate regression.

$$R_{it} = \alpha_{01} + \beta_1 NIBREM_{psit/Pit-l} + \beta REM1_{psit/Pit-l} + \beta REM2_{psit/Pit-l} + e_{it} \dots (3)$$

$$R_{it} = \alpha_{01} + \beta_1 NI_{psit/Pit-l} + \beta REM_{psit/Pit-l} + \beta REM2_{psit/Pit-l} + e_{it} \dots (4)$$

Where :

R_{it} : annual stock return for the firm i in year t, which calculated as follow:

$$R_{it} = (P_{it} - P_{it-1}) / P_{it-1} + Div$$

NI_{psit} : net income or operating income per share divided by stock price at the beginning of the year.

If REM coefficients are significantly positive we prove that REM is priced positively in Kuala Lumpur market, while if the coefficients are negative, we indicate that the investors price REM negatively.

However, as discussed above, the pricing of REM can be explained by different scenarios; firstly, managers used REM informatively to deliver some private information and the market analyzes this information and prices it positively. Secondly, managers used REM opportunistically to achieve their special interest, and the market priced them positively due to functional fixation of investors on reported earnings (Healy & Wahlen, 1999; Alqerm & Abdeljalil, 2008; Gunny, 2010). Therefore, the results of the first hypothesis present implicit evidence about the pricing fairness of the REM practices. Particularly, if the REM is informative and priced positively (negatively) in the stock market, then it is priced fairly (unfairly), while, if it is opportunistic and priced positively (negatively), it is priced unfairly (fairly).

Discussing the results of the study:

Descriptive statistics:

Table (1) summarizes the descriptive statistics about the results of the DisExp, OCF, and ProdCost for the sample of the study. For every industry year with more than 15 firms, the equations are estimated cross-sectionally over the period from 2002 to 2010. All cases at the top and bottom 1% of their distributions are excluded to avoid the influence of outliers.

The reported coefficients, adjusted R square, and the number of observations are the mean values across industry – years. The regression coefficients are significant and consist with previous evidence (e.g. Gunny, 2009; Roychowdhury, 2006) and the coefficients signs as predicted in (Roychowdhury, 2006) exempt changes in sales for the current year in our study -0.03 compared to 0.04 in Roychowdhury study.

However, the negative sign of changes in sales might be an extra evidence about the usage of the production cost as a tool for EM. The explanatory powers of the estimation models are relatively higher than that in the previous studies. As predicted the R square for the OCF model is the lowest 0.37 compared to 0.83 for discretionary expenses model, and 0.91 for production cost model. Our finding in this regard are similar to the previous evidence just with some differences specially the discretionary model where it's explanatory power in Roychowdhury only 0.38 compared to 0.83 in this study.

Table (1)
summarizes the REM proxies' estimation models

Discretionary Exp Model		OCF Model		Production Cost Model	
(Constant)	0.05448157	(Constant)	0.041148233	(Constant)	-0.069543431
TAsset	1.155848527	TAsset	-1.418479902	TAsset	-0.763885304
Sales	0.206275863	Sales	0.024024147	Sales	0.908588407
		ChSales	0.015155745	ChSales	-0.027852083
				PrevChSale	-0.039484013
R square	0.82654547	R square	0.36738247	R square	0.9124567
No. of industry year	74	No. of industry year	80	No. of industry year	68
Average no. of observation	528	Average no. of observation	508	Average no. of observation	463

In table (2) we present the correlation between the variables of the study. The table, as predicted, shows a significant correlation between all variables. Interestingly, the correlation between REM measures is positive 0.132 which can be seen as evidence that managers use different techniques at the same time to manage earnings. In other words, the significant positive relation between the REM asserts the complementary usage of the different techniques to manipulate earnings consistent with (matsuura, 2008).

Table (2)
presents the Correlations between variables

		UOCFpsPit1	UPRODpsPit1	NipsPit1	EBITpsPit1	REM1	REM2
UDISEXpsPit1	Pearson Correlation	.109**	-.326**	-.096**	-.187**	-.938**	-.206**
UOCFpsPit1	Pearson Correlation		-.382**	.133**	.075**	-.229**	.651**
UPRODpsPit1	Pearson Correlation			-.146**	-.129**	.633**	-.100**
NipsPit1	Pearson Correlation				.740**	.025	.183**
EBITpsPit1	Pearson Correlation					.106**	.265**
REM1	Pearson Correlation						.132**

Testing the hypotheses:

Table (3) presents the results of the regressions of the first and second models to test the first hypothesis about the ability of REM measures to predict the future performance for the firm. The table shows, as predicted, a very weak explanatory power for the models for the two operating measures, OCF and EBIT. Interestingly, all the models are significant at 1% level. Furthermore, the table illustrates negative relationship between the first and second year performance measures and the first measure of REM consistent with our prediction about the opportunistic EM, while the second measure has positive relationship with the operating performances. Therefore, the first measure provide clear evidence about the opportunistic use of the discretionary expenses and production cost to inflate earnings and they don't provide a signal about the future performance of the firm which is consistent with (Roychowdhury, 2006; Zang, 2006).

On the other hand, the second measure of REM, abnormal OCF, has a significant positive coefficient in all the prediction models, which cannot provide clear evidence about the opportunistic usage of the sales discounts as a measure of REM. In fact, the positive relation between the abnormal operating cash flow and the future performance indicate an informative usage of this measure. Therefore, we couldn't have enough evidence to reject the first hypothesis completely; rather we reject the hypothesis partially. Particularly, we reject the first null hypothesis for the first measure of REM, which mean that managers used discretionary expenses and production cost to manage earnings opportunistically, while we fail to reject it for the second measure of REM, OCF.

Table (3)

presents the regressions of first and second year operating performance
on the current year REM measures:

	OCF _{t+1}	OCF _{t+2}	EBIT _{t+1}	EBIT _{t+2}	OCF _{t+1}
Constant	0.089**	0.104**	0.134**	0.146**	0.139**
REM1	-0.077**	-0.069**	-0.046**	-0.04**	
REM2	0.127*	0.065**	0.122**	0.099**	
UDisExp					-0.044**
UOCF					0.102**
UProdCost					-0.108**
R square	0.018	0.007	0.015	0.01	0.027

Regarding the second hypothesis about the relationship between REM and stock returns, table (4) below summarizes the results of the multivariate regressions for model 3 and 4. The table shows a positive relationship between accounting earnings and annual stock returns similar to the results in previous studies. We find that the explanatory power of the model showed a slight improvement by decomposing net income into net income before REM and REM, which provide evidence that investors rely on the bottom line in net income and they don't investigate further in the detailed items of the accounting earnings. These findings consist with (Sloan 1996; Xie, 2001) argument that the mispricing of EM is due to the functional fixation.

Table (4)

summarizes the results of the regressions for the models 3 and 4

	Constant	NI	NIBREM	REM1	REM2	R	R Square
SR	-0.049**	0.377**				0.218	0.048
SR	-0.049**		0.377**			0.218	0.048
SR	-0.054**		0.361**	-0.034	0.076**	0.232	0.054

However, the table shows that the coefficient of the REM2 is positive and significant, which indicates that the investors in Kuala Lumpur market do consider OCF in pricing their shares. Conversely, the coefficient of the REM1 is insignificant which indicates that investors are unaware or they don't realize the usage of discretionary expense and production cost to affect the accounting numbers. This is consistent with Graham (2005) and Gunny (2009) that managers tend to use discretionary expenses and production cost to manipulate earnings because it is difficult to detect. Based on the previous discussion, we didn't have enough evidence to reject the second hypothesis. Obviously, our findings post that managers used REM practices, especially discretionary expenses and production cost, to manipulate earnings and that the investors in Kuala Lumpur market are misled by these practices.

The conclusion:

This study examines the role of REM practices in pricing the firms' stock in Kuala Lumpur stock exchange, and whether they are informative or opportunistic. While the evidence from previous literature provides mixed evidence about the informative and opportunistic usage of REM (e.g.

Roychowdhury, 2006; Gunny, 2009), most of the studies stayed salient about how the capital market understand these practices.

The results of the study show a significant negative relationship between the discretionary expenses and production cost as a measure of the REM with future performance. Conversely, they show a significant but weak positive relationship between the abnormal operating cash flow and the future performance, and the stock return.

Hence, this study provides strong evidence about the opportunistic use of discretionary expenses and production cost to manipulate earnings, but, it provides little evidence about the informative usage of operating cash flow. This contradict usage of the REM techniques might be intentional to increase the ambiguity about the usage of the EM. As discussed in Gunny (2009), sometimes managers use several techniques in different directions to make it harder to detect or judge the informative or opportunistic usage for the compounded effect of the EM.

Regarding the pricing evidence, our study provides evidence about the mispricing of the REM in the stock market, and that investors depend on the bottom line net income. This finding consists with the previous evidence about the mispricing of discretionary accruals (e.g. Sloan, 1996; Xiu, 2003).

Several interesting remarks can be highlighted from this study; Firstly, while some previous studies about the accounting earnings management in Kuala Lumpur market argued that managers use AEM informatively, our study provide evidence that this is not the case for REM. Secondly, it provides evidence about the functional fixation on net income in pricing the shares which make it easier for investors to be misled. Thirdly, the future studies about REM should investigate the different techniques that might be used by managers to manipulate earnings instead of using aggregate measures for REM. And finally, financial analyst, investors, and regulators should analyze the financial numbers deeply, specially the discretionary expenses and the production cost, to evaluate the firms' value.

However, there are some limitation on this study; firstly ,regarding to the assumption that the estimation models estimate the REM proxies correctly. Secondly, we implicitly assumed that KLSE is efficient at the semi strong level. Therefore, we can't deny that the misestimating or chances might cause these findings.

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