REAL EARNINGS MANAGEMENT: EVIDENCE FROM VIETNAM*

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Abstract:

We examine real earnings management in Vietnamese listed firms. In accordance with prior literature, we find that real earnings management is more severe in firms that have low ROA, low market-to-book ratio. Moreover, firms that have earnings close to zero are more likely to engage in real earnings management. This conclusion is consistent across different proxies used. Specifically, these firms exhibit significantly lower abnormal cash flows, lower discretionary expenses but higher productions costs than other firms do. Based on the results, we conjecture that reduction of discretionary expenses and overproduction may be more favorable tactics in real earnings managment.

1. Introduction

Earnings management is defined as activities to purposely alter financial statements to mislead shareholders or other stakeholders. It is an attempt by managers to achieve specific earnings thresholds (Degeorge et al., 1999) or private outcomes (Cheng and Warfield, 2005). Additionally, it tends to be more severe around major financial events such as stock offerings (Teoh et al., 1998), share repurchases (Gong et al., 2008).

On one hand, earnings management can be conducted by accrual-based earnings management. This takes advantage of the accrual principles, which allow certain level of management discretion in estimating the magnitude and timing of economic transaction recorded on the books, creating temporary or permanent discrepancy between financial income and cash flows (Richardson et al., 2005). On the other hand, managers conduct real earnings management through operational decisions, such as acceleration of sales, postponement of research and development, reduction in discretionary expenses, or overproduction (Healy and Wahlen, 1999, Dechow and Skinner, 2000, Roychowdhury, 2006). These manipulations

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do not only affect the numbers on the accounting books, but also cash inflows and outflows of the firm.

Earnings management is strategic behaviors, sometimes to achieve specific earnings thresholds. Burgstahler and Dichev (1997) report the discontinuity in frequency of firm-years around zero earnings. Degeorge et al. (1999) identify three thresholds that induce earnings management behaviors. Firms very often attempt to beat these thresholds. The first threshold derives from the psychologically differentiation between positive and negative (or zero earnings). Firms with negative or zero earnings are likely to inflate earnings upwards. The second and third thresholds are performance relative to the previous comparable period and relative to the analyst forecasts. Degeorge et al. (1999) report that the first threshold (i.e. zero earnings) is predominant. Later literature looks to the firms with earnings around these thresholds. Dechow et al. (2003) are unable to find evidence that firms reporting small profits manage accruals. However, Roychowdhury (2006) provides evidence that managers exercise real activities manipulation around the zero threshold. These findings imply that firms reporting small profits are likely to exercise real earnings management rather than accrual-based one.

We focus on real earnings manipulation of firms reporting negative earnings in the Vietnamese stock market. Vietnamese firms are often reported as having weak corporate governance practices (ADB, 2014). Moreover, Vietnam has been infamously plagued with earnings management scandals. As a typical case, mining firm KSS lost 80% of its market value within days and then compulsorily delisted when its chairman, CEO and chief accountant were arrested on June 2015 for fraudulence in financial reporting. Before the incidence, the firm had constantly reported positive net income accompanied by negative operating cash flows for almost 10 years in a row. In the same month, CEO of the medical equipment dealer JVC was prosecuted for misconducts, and very soon after, the shareholders realized that VND400 hundred billions (USD20 million) cash on hand had awkwardly disappeared. As an emerging market with potentials, Vietnamese stocks are expected to welcome large foreign portfolio investment in the coming years. To conquer that upcoming wave of opportunities, the government is working hard toward the soundness and liberalization of the market. Circular No. 123/2015/TT-BTC which lifted constrains in foreign ownership regulations has come into effect since 2015, setting grounds for a market upgrade by MSCI. This ambition can be accomplished only if the government agencies can guarantee the reliability of financial reporting system and build trust among investors. Thus, this paper provides not only predictions for how firms manipulate their earnings, but also a reference point for market participants to differentiate good firms from bad firms, and for supervisory bodies to establish effective corporate governance practices, reliable financial reporting, and solid future policies.

Alphonse and Hang (2014) find that Vietnamese firms are likely to manipulate accruals to inflate earnings. Their results suggest that Vietnamese firms tend to use accruals to inflate earnings especially in those with low level of financial distress. In this study, we focus on real earnings management to provide a picture on earnings management

behaviors of Vietnamese firms. We find that firms reporting small profits exhibit obvious signs of real earnings management, particularly lower cash flows from operating activities, lower discretionary expenses and higher production costs. In addition, based on the statistic results, we conjecture that reduction of discretionary expenses and overproduction are more favorable tactics for real earnings management over sales acceleration.

The rest of the paper is as follows. Section 2 provides literature reviews; Section 3 discusses methodology and develops research hypotheses; Section 4 presents statistic results and Section 5 concludes.

2. Literature reviews

Managers manipulate earnings to achieve private outcomes to the cost of other stakeholders by either accrual or real earnings management, or the combination of the two (Dechow and Skinner, 2000). Accrual-based earnings management takes advantage of the accrual principles, which allow certain level of management discretion in estimating the magnitude and timing of economic transaction recorded on the books, creating temporary or permanent discrepancy between financial income and cash flows (Richardson et al., 2005). However, accrual-earnings management is more scrutinized by auditors or regulators. Therefore, managers avoid using solely accrual-based earnings management extensively to meet earnings benchmarks. They are more likely to engage real earnings management (Graham et al., 2005). Managers conduct real earnings management through operational decisions, such as acceleration of sales, postponement of research and development, reduction in

discretionary expenses, or overproduction (Healy and Wahlen, 1999, Dechow and Skinner, 2000, Roychowdhury, 2006). These manipulations do not simply alter the numbers on the accounting books, but also cash inflows and outflows of the firm. These manipulations may produce contradictory outcomes. For example, while overproduction reduces cost of goods sold, it results in a higher holding cost of larger inventories (Roychowdhury, 2006).

Understanding earnings management has considerable economic significance. Accounting inaccuracy created by accrual-based earnings management must be corrected in future accruals and earnings (Dechow and Dichev, 2002). Real earnings management is risky and expensive, as it averts firms from sustainable operation and imposes additional costs (Roychowdhury, 2006). These have negative effect on the quality of current-period earnings and pave the way for future earnings surprises, which in turn create abnormality in stock returns (Sloan, 1996) and increase the likelihood of a price crash in subsequent periods (Chen et al., 2017).

Earnings management behaviors are more tactical than spontaneous. Specifically, firms usually manipulate earnings to meet or exceed specific earnings thresholds not to disappoint stakeholders. Degeorge et al. (1999) show that three common thresholds are: zero earnings, previous year earnings, and analyst-forecasted earnings. These thresholds have been used in a number of later studies. Roychowdhury (2006) finds evidence of real activities manipulation around earnings thresholds, in particular, the zero earnings. Along with zero earnings and previous

year earnings, Bornemann et al. (2012) find manipulations of bank reserves to meet two other thresholds: earnings of a peer group and volatility of past earnings. Additionally, earnings management is detected around important financial events. For example, Teoh et al. (1998) find that public firms tend to inflate earnings before equity offerings to attract investors. On the contrary, Gong et al. (2008) assert that firms manipulate earnings downward before a share repurchase to artificially dampen market price. Managers can also manipulate earnings for private outcomes. Cheng and Warfield (2005) indicate that managers who have high equity incentives are more likely to report earnings that meet or exceed expectations.

3. Methodology

3.1. Measures of real earnings management

We use proxies for real earnings management which are suggested by Roychowdhury (2006). He argues that managers use excessive price discounts or credit terms to temporarily accelerate sales, which results in an increase in the current period earnings. However, the current period cash flows (CFO) may not be affected by this strategy. Given increased sales, unchanged CFO will appear to be abnormally low. Abnormal CFO is defined as the difference between actual CFO and "normal" CFO given certain level of and the change in sales. Thus, abnormal CFO can be a proxy for real earnings management.

Abnormal CFO is estimated as follows. First, we run cross-sectional regression (1) for each industry and year. The industry-years with less than 15 firms are removed from the sample. Normal CFO (Norm_CFOA$_t$) is the

fitted value from Equation (1).

$$CFO_t / A_{t-1} = \beta_0 + \beta_1 * (1 / A_{t-1})$$
$$+ \beta_2 * (S_t / A_{t-1}) + \beta_3 * (\Delta S_t / A_{t-1}) + \varepsilon_t \quad (1)$$

$$ACFOA_t = CFO_t / A_{t-1} - Norm\_CFOA_t \quad (2)$$

Where CFO_t is the cash flows from operating activities in year t; A is the total assets; S is the net sales; and ΔS is the change in net sales.

Abnormal CFO ($ACFOA_t$) is the difference between CFO_t / A_{t-1} and Norm_CFOA$_t$ (Equation 2). Similar to the argument in Roychowdhury (2006), smaller abnormal cash flows imply more real earnings management.

The second proxy for real earnings management is abnormal discretionary expenses. Roychowdhury (2006) defines a discretionary expense as a subjective cost that is not essential for business operations. Advertising expenses, R&D expenses and selling, general and administrative expenses are all categorized as discretionary expenses. In our sample, we calculate discretionary expenses as the sum of sale expenses and administrative expenses. Similar to the above procedure, we run regression Equation (3) and use the fitted value as proxy for normal discretionary expenses (Norm_DISA$_t$). The difference between actual discretionary expenses and normal discretionary expenses is the abnormal discretionary expenses (ADISA$_t$). Lower abnormal discretionary expenses imply more real earnings management.

$$DIS_t / A_{t-1} = \beta_0 + \beta_1 * (1 / A_{t-1})$$
$$+ \beta_2 * (S_{t-1} / A_{t-1}) + \varepsilon_t \quad (3)$$

$$ADISA_t = DIS_t / A_{t-1} - Norm\_DISA_t \quad (4)$$

Where DIS_t is the discretionary expenses in year t; A is the total assets and S is the net sales.

The third proxy used by Roychowdhury (2006) is abnormal production costs. In order to inflate earnings, managers may boost production more than needed to lower the average total cost per unit, thus deflate the reported cost of goods sold and increase operating profits margin. Following Roychowdhury (2006), we run the regression Equation (5) to estimate the normal production costs (Norm_PRODA$_t$) as the fitted value. Production costs are as the sum of cost of goods sold and the change in inventory during the year.

$$PROD_t / A_{t-1} = \beta_0 + \beta_1 * (1 / A_{t-1})$$
$$+ \beta_2 * (S_t / A_{t-1}) + \beta_3 * (\Delta S_t / A_{t-1})$$
$$+ \beta_4 * (\Delta S_{t-1} / A_{t-1}) + \varepsilon_t \quad (5)$$

$$APRODA_t = PROD_t / A_{t-1} - Norm\_PRODA_t \quad (6)$$

Where $PROD_t$ is production costs in year t; A is the total assets; S is the net sales; and ΔS is the change in net sales.

Abnormal production costs (APRODA$_t$) is the difference between actual production costs and normal level of production costs. Larger abnormal production costs indicate more real earnings management.

Following Cohen et al. (2008), we create a comprehensive measure of real earnings management by aggregating the above three proxies. The newly constructed proxy is COM_REM$_t$. Lower COM_REM$_t$ indicates higher level of real earnings management.

$$COM\_REM_t = ACFOA_t + ADISA_t - APRODA_t \quad (7)$$

3.2. Research hypotheses

Following Roychowdhury (2006), we compare a group of suspected firms with other firms in term of abnormal CFO, abnormal discretionary expenses and abnormal production costs. The suspected firms are those that have earnings close to zero earnings threshold. We propose the following four hypotheses:

H1. Suspected firms exhibit lower abnormal cash flow from operating activities than non-suspected firms do.

H2. Suspected firms exhibit lower abnormal discretionary expenses than non-suspected firms do.

H3. Suspected firms exhibit higher abnormal production costs than non-suspected firms do.

H4. Suspected firms exhibit lower COM_REM than non-suspected firms.

Cohen et al. (2008) indicate that there is a trade-off between real earnings management and accrual earnings management. Thus, we include discretionary accruals - a common measure for accrual-based earnings management in literature - in the model. We apply modified Jones model (Dechow et al., 1995) to estimate discretionary accruals (DA$_t$) as the difference between total accruals (TA$_t$) and the fitted value of regression Equation (8), which is proxy for normal accruals (Norm_TA$_t$).

$$TA_t / A_{t-1} = \beta_0 + \beta_1 * (1 / A_{t-1})$$
$$+ \beta_2 * (\Delta S_t / A_{t-1})$$
$$+ \beta_3 * PPE_t / A_{t-1}) + \varepsilon_t \quad (8)$$

$$DA_t = TA_t / A_{t-1} - Norm\_TA_t \quad (9)$$

Where accruals (TA_t) is the difference between net operating earnings and operating cash flows; PPE_t is the value of property, plant and equipment.

Following Roychowdhury (2006) and Guo et al. (2015), we add firm size, leverage, market-to-book ratio and returns on assets as control variables in our regression model to control for firm characteristics.

We investigate the difference in the level of real earnings management between suspected firms and the rest of the sample by examining the coefficient of variable SUS in the following model:

$$REM_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 MTB_{it}$$
$$+ \beta_3 ROA_{it} + \beta_4 LEV_{it}$$
$$+ \beta_5 ABS\_DA_{it} + \beta_6 SUS_{it}$$
$$+ \sum \gamma_j Industry_j + \sum \lambda_t Year_t + \varepsilon_{it} \quad (10)$$

Where:

REM= proxies for real earnings management (ACFOA, ADISA, APRODA and COM_REM)

Size=logarithm of market capitalization

LEV= long-term liabilities scaled by total assets

ROA=income before extraordinary items scaled by total assets

ABS_DA= Absolute value of discretionary accruals (DA)

MTB= market to book ratio

Industry= Dummies for industries

Year= Dummies for years

SUS= 1 if operating profits is positive and less than 1% of total assets

H1 and H2 mean that β_6 is expected to be negative if REM is measured as ACFOA or ADISA. H3 and H4 imply that β_6 is expected to be positive if REM is measured as APRODA or COM_REM.

4. Data and descriptive statistics

We collect financial data for all firms listed on the Hochiminh Stock Exchange and Hanoi Stock Exchange from 2007 to 2015 from Vietstock website. For calculation of market capitalization, we use number of shares outstanding provided by Stoxplus and share price data from CafeF website. We use industry classification by Vietstock, which is based on The North American Industry Classification System. We exclude financial firms for particularities in their operational activities.

Since we use change in sales of the previous year to estimate abnormal production costs and use the lagged total assets to estimate other proxies of earnings management, firm-years of 2007 and 2008 are lost. Furthermore, as mentioned in Section 3, we require at least 15 firms in each industry-year to estimate the proxies of earning management. Industry-years with less than 15 firms are removed from the data. Finally, we have 1530 observations, in which 188 observations (12.3%) are considered as suspected firm-years.

Descriptive statistics in Table 1 serves as a preliminary comparison between suspected firms and non-suspected firms. For non-suspected firms, means and medians of all real earnings management proxies (first four variables) are very close to zero, while those in suspected firms are much more different from zero. Abnormal cash flows (ACFOA) of suspected firms are 3.7% lower in term of mean, and 2.83% lower in term of median.

Abnormal discretionary expenses (ADISA) of suspected firms are also lower. These results are in accordance with our first and second hypotheses. Moreover, consistent with our third hypothesis, suspected firms have higher means and medians of abnormal production costs (APRODA). In line with our fourth hypothesis, suspected firms exhibit lower comprehensive measure of real earnings management (COM_REM) than non-suspected firms do. All of these differences are highly significant, strongly confirming our suspision that suspected firms use real earnings management to achieve the threshold of zero earnings.

Table 2 reports the Pearson correlation matrix of the four proxies of real earnings management, SUS and control variables. The

Table 1: Mean/Median Differences between Suspected and Non-suspected firms

Variable	Suspected firms		Non-suspected firms		Mean differences	Median differences
	Mean	Median	Mean	Median		
COM_REM	-0.0946	-0.0791	0.0131	-0.00320	-0.108*** (-5.90)	-0.0763*** (-4.12)
ACFOA	-0.0329	-0.0276	0.00410	0.000395	-0.0370*** (-4.11)	-0.0283*** (-3.02)
ADISA	-0.0141	-0.0137	0.00273	-0.00670	-0.0168*** (-3.92)	-0.00702** (-2.49)
APRODA	0.0476	0.0420	-0.00624	-0.00174	0.0538*** (5.26)	0.0444*** (4.38)
ABS_DA	0.0726	0.0493	0.0852	0.0644	-0.0127** (-2.06)	-0.0150** (-1.99)
SIZE	12.12	11.94	12.90	12.77	-0.788*** (-7.22)	-0.833*** (-7.41)
MTB	0.610	0.477	0.944	0.769	-0.334*** (-6.31)	-0.294*** (-7.10)
ROA	0.00509	0.00504	0.0635	0.0479	-0.0584*** (-10.10)	-0.0428*** (-23.42)
LEV	0.148	0.0947	0.139	0.0801	0.00902 (0.75)	0.0152 (1.23)
N	188		1342			

COM_REM=ACFO+ADIS-APRODA; ACFOA= Abnormal CFO; ADISA= abnormal discretionary expenses; APRODA= abnormal production costs; ABS_DA= Absolute value of discretionary accruals. See Section 3 for measurement of these variables.

SIZE=ln(market capitalization), ROA=Net Operating profit scaled by total assets; LEV=long-term liability scaled by total assets;; SUS=1 for suspected firm-years and 0 otherwise. Suspected firm-years are firms those have net operating profit scaled by total assets between 0 and 1percent.

(***), (**), (*) indicate significance at the 1%, 5% and 10% level, respectively; t-statistics are presented in parentheses.

Table 2: Correlation matrix

	COM_REM	ACFOA	ADISA	APRODA	ABS_DA	MTB	SIZE	ROA	LEV
ACFOA	0.771***								
ADISA	0.569***	0.154***							
APRODA	-0.881***	-0.446***	-0.460***						
ABS_DA	-0.00568	0.0145	0.0306	0.0363					
MTB	0.221***	0.154***	0.173***	-0.189***	0.114***				
SIZE	0.201***	0.130***	0.156***	-0.181***	0.0620*	0.634***			
ROA	0.431***	0.311***	0.213***	-0.413***	0.175***	0.305***	0.377***		
LEV	-0.0745**	-0.0156	-0.0954***	0.0796**	-0.109***	0.0102	0.0352	-0.208***	
SUS	-0.161***	-0.117***	-0.106***	0.142***	-0.0391	-0.165***	-0.188***	-0.245***	0.0216

This table reports the Pearson correlation matrix of key variables. COM_REM=ACFO+ADIS-APRODA; ACFOA= Abnormal CFO; ADISA= abnormal discretionary expenses; APRODA= abnormal production costs; ABS_DA= Absolute value of discretionary accruals. See Section 3 for measurement of these variables.

SIZE=ln(market capitalization), ROA=Net Operating profit scaled by total assets; LEV=long-term liability scaled by total assets; SUS=1 for suspected firm-years and 0 otherwise. Suspected firm-years are firms those have net operating profit scaled by total assets between 0 and 1percent.

(***), (**), (*) indicate significance at the 1%, 5% and 10% level, respectively. T-statistics are presented in parentheses.

correlations between SUS and each of COM_REM, ACFOA, ADISA and APRODA are all significant and have expected signs (-0.161, -0.117, -0.106 and 0.142, respectively). They indicate that suspected firms tend to have more real earnings management. Moreover, the significant correlations between ROA and these four proxies of real earnings management (0.431, 0.311, 0.213, -0.413, respectively) suggest that firms with high level of earnings are less likely to engage in real earnings management. Similarly, larger firms (high SIZE) with higher growth (high MTB) tend not to have real earnings management. However, the correlations between ABS_DA and each of ROA, MTB and SIZE suggest that larger firms, high-growth firm and better-performing firms are more likely to engage in accrual-based earnings management. Since we do not observe any extreme correlation among independent variables, multicollinearity should not be a concern in our regression.

5. Regression results

Table 3 reports results for regression (10) with different proxies of real earnings management. The model includes SIZE, MTB, ROA, LEV and ABS_DA as control variables, to address the possibility that our estimations of abnormal values are systematically correlated with these variables. While abnormal values show almost no relationship with SIZE and LEV, firms with better performance (ROA) and higher market valuation (MTB) undertake significantly less real earnings management, as shown consistently across all four measures. In other words, real earnings management appears to be indigenous to less vibrant firms. The explanation could be that marginal benefits of earnings management are much less in good firms. There is little incentive to get into complication of manipulation if the firm is already vigorous.

Across four regressions, it is noticible that the coefficients of ROA are largest in magnitude (absolute values range from 0.119 to 1.352) and also highest in statictiscal significance (all at 1%). For comparison, MTB coefficients have absolute values ranging from 0.01 to 0.0481. Given that standard deviations of MTB and ROA are roughly 0.7 and 0.09, a change by one standard deviation in ROA will be accompanied by a much larger change in abnormal estimates than a one standard deviation change in MTB. Hence, the decision to engage in real earnings management (as represented by our abnormal estimtes) is strongly determined by the level of earnings. Indeed, the purpose of real earnings management is to have a desirable reported earnings. This confirms the approprietness of our four proxies.

Dummy variable SUS shows the differences between suspected firms and other firms. Consistent with our first hypothesis, SUS coefficient is negative in column (1), indicating that suspected firms are more likely to undertake real earnings management by sales acceleration using credits and discounts, which leads to no change or disproportionate smaller increase in CFO. Moreover, negative SUS coefficient in column (2) suggests that suspected firms inflate earnings by cutting discretionary expenses, such as selling expenses and administration expenses. In agreement with the third hypothesis, significant positive SUS coefficient in column (3) implies that firms effectually manage to reach zero earnings

Table 3: Regression results

VARIABLES	(1) ACFOA	(2) ADISA	(3) APRODA	(4) COM_REM
SIZE	-0.00224	0.00169	0.00121	-0.00177
	(-0.84)	(0.77)	(0.33)	(-0.26)
MTB	0.0163**	0.0100*	-0.0218**	0.0481**
	(2.51)	(1.69)	(-2.38)	(2.57)
ROA	0.493***	0.119***	-0.739***	1.352***
	(5.70)	(2.78)	(-7.46)	(6.97)
LEV	0.0405*	-0.0259*	0.00118	0.0135
	(1.88)	(-1.94)	(0.05)	(0.30)
ABS_DA	-0.0629	-0.00483	0.189***	-0.257*
	(-0.71)	(-0.28)	(3.07)	(-1.86)
SUS	-0.0161*	-0.00889**	0.0201**	-0.0451***
	(-1.77)	(-2.07)	(2.10)	(-2.71)
Constant	-0.00670	-0.0345	0.0301	-0.0713
	(-0.20)	(-1.39)	(0.74)	(-0.96)
Observations	1,419	1,419	1,419	1,419
R-squared	0.119	0.075	0.214	0.232

SIZE=ln(market capitalization), ROA=Net Operating profit scaled by total assets; LEV=long-term liability scaled by total assets; SUS=1 for suspected firm-years and 0 otherwise. Suspected firm-years are firms those have net operating profit deflated total assets between 0 and 1 percent.

The coefficients of industry and year dummies are not reported.

(***), (**), (*) indicate significance at the 1%, 5% and 10% level, respectively. T-statistics are presented in parentheses.

threshold by overproduction. In column (4), the combined effects of the previous three measures result in a highly significant coefficient. It is therefore obvious that listed firms on Vietnam stock market actually manipulate their operational activities to meet zero earnings threshold.

This table reports the results of the regression model (10), in which REM indicates the level of real earnings management which is measured by abnormal CFO (ACFOA), abnormal discretionary expenses (ADISA), abnormal production costs (APRODA) and COM_REM (COM_REM=ACFO+ADIS-APRODA). ABS_DA= Absolute value of discretionary accruals. See Section 3 for measurement of these variables.

However, we acknowledge that the significance level of SUS coefficient is at 10% in the first column, which means the power of the test is not so strong compared to other columns. This can be explained in two different ways.

First, as discretionary expenses are mostly catagorized as operating activities, when a firm manupulate earnings by cutting discretionary expenses, it simultaneously decrease cash outflows, and thus increase cash inflows from operating activities. At the same time, sales acceleration by credit sales and discounts dampen cash-flows-to-asset ratio. These two contradictory effects may upset each other, resulting in a less significant coefficient of SUS in ACFOA model. It is worth reminding the relationship between ACFOA and ADISA is not one-way. Efforts to accelerate sales may also increase selling expenses, one component of discretionary expenses, thus potentially reduce the statistical significance of SUS in ADISA model.

We propose a second explanation as follows. Despite mutual offseting effects between sales acceleration and reduction of discretionary expenses, coefficient of SUS in ACFOA model is less significant probably because sales acceleration may not be the favorite approach in real earnings manipulation. Reduction of discretionary expenses and overproduction seem to be more favorable tactics, as shown with higher level of statistical significance. This is not unusual, as acceleration of sales by credit is very risky, and to inflate earnings by pushing sales with large discounts does not always work out as expected, as it depends on an important external factor – the customers. Whereas, cutting discretionary expenses and reducing cost of goods sold by overproduction can be done internally. They are nevetheless

very safe tactics and the effects are assured. Anyhow, the overproduced goods is in the storage of inventory, much safer a type of asset than in receivables generated by accelerated sales.

6. Conclusion

In this paper, we use a sample of listed firms on both exchange HSX and HNX from 2007-2015 to examine real earnings management in Vietnamese listed firms. In accordance with prior literature, we find that managers are tempted to manipulate operational activities to meet zero earnings threshold. Specifically, they engage in real earnings management through sales acceleration, reduction of discretionary expenses, and overproduction. This conclusion is consistent across different proxies used, including abnormal cash flows, abnormal discretionary expenses and abnormal productions costs. Additionally, real earnings management is less severe in better-performing, higher-market-valuation firms. Based on the results, we conjecture that reduction of discretionary expenses and overproduction may be more favorable tactics in real earnings management.

Given the above results, we suggest that market participants, especially individual, non-sophisticated investors, should be skeptical of the reported earnings that are close to zero. They should closely examine whether there are inconsistency between sales growth and cash flows, discretionary expenses and inventory.

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