IT IS DEFINITELY UNETHICAL TO MANIPULATE FINANCIAL STATEMENTS, BUT MAYBE IT IS LESS UNETHICAL AND BETTER, THAN REAL MANIPULATION

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Abstract

The accounting-based earnings manipulation involves choosing appropriate accounting methods to reach desired levels of earnings, while the real activities earnings manipulation uses the timing and/or magnitude of operating decisions to reach desired earnings. The accounting bodies FASB and IASB have put a lot of effort in preventing the former during the last decades but there is probably no doubt that both kinds of manipulation are unethical.

Rigid accounting standards prohibit companies from letting management include some private information when the financial consequences of business activities are disclosed, which prevent accounting manipulation. But when management has strong motives, rigid accounting standards animate real manipulation.

By presenting simplified versions of real-world case study examples reflecting different subjects, we demonstrate that the long term consequences are always worse for the investor, when real manipulation is used rather than accounting manipulation.

Instead, increased transparency would be helpful for the investor to determine if there has been exercised accounting

manipulation or not. But it remains to be decided whether some accounting manipulation is acceptable, despite it is clearly unethical.

I. INTRODUCTION

During the last more than 25 years a huge number of articles dealing with earnings management have been published, concerning how to detect it, the different motives and the consequences.

Schipper (1989) discussed the distinction between accounting and real manipulation already in her pioneering comments on earnings management. Later, Healy and Wahlen (1999) documented the two forms of earnings management.

The accounting-based (or accrual-based) earnings manipulation involves choosing appropriate accounting methods to reach desired levels of earnings, while the real activity manipulation uses the timing and/or magnitude of operating decisions to reach desired earnings. The former is often relatively transparent in the year of the change, and it may be flagged by the auditor in a public way and may even receive footnote disclosure. The latter is usually harder for an outsider to observe since it reflects contributions and consequences of operating decisions made by management intending to reach desired earnings. While the latter is unlikely to be judged to be a violation of securities law, the accounting bodies Financial Accounting Standards Board (FASB) and International Accounting Standards Board (IASB) have put a lot of effort in preventing the former during the last decades for which reason violation might lead to enforcement actions by financial authorities. However, there is probably no doubt that both kinds of manipulation are to be considered unethical.

When management have strong motives for exercising manipulation as a means to meet certain earnings requirements or expectations, then what? One answer is to cut off the possible accounting manipulation options, but in reality this would only make sense in the short-term since this could lead to (more) real manipulation which again could have unintended economic consequences in the longer term.

Recent research shows increased appreciation for the importance of understanding how companies manage earnings through real activities manipulation in addition to accrual-based earnings management activities, e.g. Gunny (2005), Roychowdhury (2006), Zang (2007), and Cohen & Zarowin (2010). For example, Roychowdhury (2006) finds evidence that companies use multiple real earnings management methods in order to meet certain financial reporting benchmarks to avoid reporting annual losses. In particular, his evidence suggests that managers provide price discounts in order to boost sales temporarily, reduce discretionary expenditures in order to improve reported margins, and overproduce to lower the cost of goods sold.

Our main concern here is if restrictions relating to the prevention of accounting manipulation can potentially animate real manipulation. The reason why this is unacceptable is that real activities manipulation unlike accounting manipulation is costly and includes the possibility that cash flows in future periods will be affected negatively by the actions currently taken to increase earnings. Consequently, it could be worth considering whether we can afford and accept some degree of accounting manipulation as a means to avoid the potentially more severe real manipulation.

The remainder of the paper is structured in the following way: In section II we provide the motivation and literature review

for the study by examining literature on earnings management and we especially address real versus accounting manipulation, and we present our research question. In section III we describe method and data, and in section IV we present the findings and discuss some implications. Finally, we conclude our paper in section V.

II. LITERATURE REVIEW AND HYPOTHESIS

Manipulation of accounting information is a recognized problem in both analytical and empirical accounting research, which over the past decades has been the subject of growing interest. This has resulted in a number of projects and studies (especially in the U.S.), where the focus has been on earnings management, which is commonly thought of as an (observable?) synonym for accounting manipulation, cf. among other Healy & Wahlen (1999). Central to this research is Schipper's definition (1989, p 92) of earnings management which is:

> "... a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain (as opposed to, say, merely facilitating the neutral operation of the process)."

This seems fairly clear, but it is difficult to disagree with Dechow & Skinner (2000) that "this definition is difficult to operationalize directly using attributes of reported accounting numbers since it centers on managerial intent, which is unobservable". We do not know how the accounts would have looked if management had not had any specific intention to report as it does.

It is often postulated that accounting manipulation is found everywhere. In order to operationalize the discussion we use the International Accounting Standard No. 7 as the starting point since

this accounting standard deals with the cash flow statement. The cash flow statement shows a period's cash flows from operating, investing and financing activities, cf. IAS 7 paragraph 10, where the operating activity is defined as the company's main business activities, and other activities that are not investing or financing activities.

Using the indirect model, cash flow from operating activities are presented as net operating income before interest but after tax, NOPAT, adjusted for changes in working capital and non-cash operating items such as depreciations, amortizations and provisions, where working capital includes current operating assets less current operating liabilities excluding the items included in cash and cash equivalents. This can also be illustrated in the following accounting equation:

> Net Income (NOPAT) = Cash Flow from Operating activities (CFO) + (Change in) Accruals

Since it is usually the earnings, i.e. net income that management wants to present at a certain level when the financial statements are prepared, this means that the net income can be manipulated by adjusting the cash flow from operating activities or the accruals - or possibly both.

However, it is not trivial what management decides to do. In addition to manipulation of the accruals, companies can manage the earnings by altering real activities. The distinction is important, because while accrual-based earnings management activities have no direct cash flow consequences, real activities manipulations affect cash flows. We refer to real activities manipulation as

actions managers take that deviate from normal business practices[1].

Accounting manipulation is defined as when the managers of an organization intentionally misstate the financial information in a way which more favourably represents the entity's financial performance, i.e. it represents the use of management's discretion to make accounting choices or to design transactions to affect the reported accounting information.

To meet a certain earnings target, managers can wait until the year-end to use discretionary accruals to manage reported net income. But this strategy runs the risk that the amount of earnings that needs to be manipulated is greater than the available discretionary accruals because the discretion on accruals is bounded on General Accepted Accounting Practices (GAAP). Given the underlying economic transactions of a company, the manager's ability to report accrued earnings is limited. As a result, the earnings target may not be reached using discretionary accruals at year-end. Managers can reduce this risk by manipulating real operating activities during the year since real activities manipulations are less subject to this constraint. Another advantage of altering real activities to manipulate earnings is that auditors and regulators are less likely to be concerned with such behaviours. However, real activities manipulation can be costly and includes the possibility that cash flows in future periods will be affected negatively by the actions currently taken to increase earnings.

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[1] This definition is consistent with Roychowdhury (2006), who defines real activities manipulations as "… management actions that deviate from normal business practices, undertaken with the primary objective of meeting certain earnings thresholds".

If a manager engages in real activities manipulation and deviates from the optimal level of operating activities, negative long run economic consequences may arise. Most evidence on real activities manipulation centers on the opportunistic reduction of discretionary expenses such as R&D expenses. Although these discretionary expenses can boost earnings to meet certain targets, it entails the risk of lowering future Cash Flow from Operating activities (CFO) because this action generally reduces cash outflows and, in turn, has a positive effect on current CFO, while in the subsequent years, this positive effect is reversed when the company misses the now not developed products, models and services.

Explicit compensation contracts that link compensation to reported earnings also create incentives to manipulate earnings, and the most widely cited study investigating this incentive is Healy (1985). Even without explicit compensation agreements, there is considerable anecdotal evidence suggesting that many (or even most) companies have implicit agreements linking compensation to earnings.

If managers want to manipulate earnings, they can choose from a large set of manipulation methods. Some of the methods require real decisions (i.e. operating, financing and investment decisions) and some are pure accounting decisions. Operating decisions might involve delaying or accelerating R&D expenditures, maintenance expenditures, or sales. An example of a financing decision used to manipulate earnings is the early extinguishment of debt. When interest rates rise, the market value of the company's debt drops, and the company can extinguish the debt and report a gain. Sales of securities and fixed assets are examples of investment decisions that might be motivated

primarily by the desire to increase reported earnings, rather than the desire to increase company value. Managers can also make pure accounting decisions to influence earnings, i.e. decisions with no direct, first order effect on cash flows. Examples include selecting accounting methods such as straight-line versus accelerated depreciation, changing the residual value of equipment, and changing different accounting estimates like bad debt allowances, restructuring charges or expected charges concerning product liabilities. In some cases, manipulation may be accomplished by a combination of a real decision and an accounting decision.

Table 1: How Specific Balance Sheet Items Are Managed to Increase Income

Balance Sheet Item	Earnings Management	Effect on Income	Real Manipulation	Effect on future netincome
Gross receivables	Book revenue in advance of its being	Higher revenues	Beneficial cash discounts to shift sales	Operating revenues reduced
Deferred revenue	Reduce deferred revenues			
Net receivables	Decrease allowances for bad debts and sales returns	Higher revenues or lower selling expenses	Increase cash discounts leading to lowering net receivables and decreased allowances	Operating revenues reduced
Inventories	Book noninventory costs to inventory; fail to write down obsolete inventories	Lower cost of goods sold or SG&A expenses	Sell out slow-moving (older) goods at reduced prices (competes somewhat with usual goods)	Operating revenues reduced
Property, plant, and equipment	Book repairs and maintenance to PPE; increase estimated lives or estimated salvage values; excessive	Lower depreciation charges that appear all through the income statement, from cost of goods sold down	Postpone investments, increase real estimated usefull lives (average age of PPE increased)	Operating expenses increased
Warranty liabilities	Reduce warranty rese	Lower selling expense	Reduce real warranty period (reduce potential	Operating expenses increased
Accrued expenses	Reduce amount of expenses accrued	Lower expenses - applying to all expense lines	Postpone expenses - where purpose relate to future benefits (Sales promotion,	Operating expenses increased
Prepaid expenses	amount of expenses prepaid	Lower SG&A expense	Postpone expenses - where purpose relate to assets in the past (maintenance, repairs, inspections)	
Deferred charges	Classify too much current expense as deferred expense	Lower SG&A expense		

Note: Starting point and inspiration for this presentation, please see Penman (2013), Table 18.1, p. 599.

In Table 1, using the Balance Sheet as reference, we present some of the possible accounting earnings management activities and their consequences in the Income Statement. The table is partly a replication of Penman (2013), Table 18.1, p. 599. However, in Table 1 we have extended the table with two columns: The first column suggests potential real manipulation substitutes to the accounting manipulation activities leading to the income statement effects presented in a former column. The

second additional column presents the likely effect on future net income. For instance, the case of beneficial cash discounts may increase present income, but it is also likely to affect future income since the real effect is that the customers shift their purchases from a later period, say January, to the present period, say December, at a discount probably leading to expectations of discounts in the future too. If future discounts are not given automatically, then the customers might just wait until the company is willing to repeat the beneficial cash discounts from the previous period. The final consequence will be that future net revenues are likely to occur at a lower level than before the first beneficial cash discounts were granted.

Thomas & Zhang (2002) provide evidence on real activities manipulation through overproduction. That is, managers produce more than the quantity required to meet sales and normal target inventory levels to decrease reported cost of goods sold, resulting in increases in reported earnings. Although it improves the present profitability margin, the company incurs costs and lowers the normal (future) CFO.

Roychowdhury (2006) found evidence consistent with managers manipulating real activities to avoid reporting annual losses. Specifically, he found evidence suggesting price discounts to temporarily increase sales, overproduction to report lower cost of goods sold, and reduction of discretionary expenditures to improve reported margins. Managers provide deep discounts towards fiscal year end to boost sales. The increased sales volume that is generated disappeared when the company re-established the old prices. This action, in fact, moves the future profitability to the current period. As a result, the future profitability is harmed. Further, cross-sectional analysis reveals that these activities are

less prevalent in the presence of sophisticated investors. Other factors that influence real activities manipulation include industry membership, the stock of inventories and receivables, and management's incentives to meet zero earnings. In fact, Roychowdhury (2006) actually showed that a large part of what was assumed to be accounting earnings management, in reality was real manipulation.

In general, there are plenty of analyses which apparently confirm the expectation that manipulation takes place in virtually all situations where one might imagine that there could be an incentive to manipulate - whether it comes to maintaining an existing favourable situation or to achieve something new. However, the real extent remains poorly investigated since one of the key problems in the conduct of research into earnings management is that it is extremely difficult to identify whether observable financial data (in fact the accruals) is a direct consequence of management's intentions (the yet controlled) or whether they simply reflect developments in underlying unmanaged economic and business conditions. Many different models[2] have been presented within the last 25 years. All of them established in order to separate the controlled part of the accruals from the unmanaged part since the basic assumption is that the part which can be attributed to the development of business activity (often proxied by turnover/sales of goods) reflect the "true" development in the underlying economic conditions. The critical assumption in all these models is that there is a clear correlation between the developments in business activity or sales, and the size of key accounts in the balance sheet, like current

[2] See Jones (1991) and Healy (1985), just to mention a few. For an overview see for instance Stolowy & Breton (2004).

operating assets, etc., so that the activity development derived accruals are unmanaged, while anything beyond this is a result of managerial earnings management.

During the last several years, parallel to the on-going research in earnings management and related research areas, the accounting regulation has increased in numbers of accounting standards, in complexity, and in reduction of allowed accounting methods which continuously make the accounting earnings management more difficult since the possibilities are constantly tightened. However, the incentives are completely unaffected during this process since they are still present, which lead to our following research question:

Is accounting earnings management manipulation worse than real manipulation?

This research question expresses the impression we get as users of financial reporting information, simply because this is what is reflected in the development of international accounting regulation dealing with accounting earnings management by reducing management's possibilities for discretionary behaviour.

III. METHOD AND DATA

There is no doubt that investor is a very important stakeholder. Sometimes he is even considered the most important stakeholder to companies, for example as it was expressed in the earlier IASB framework from 1989 in paragraph 10, "… as investors are providers of risk capital to the enterprise, the provision of financial statements that meet their needs will also meet most of the needs of other users that financial statements can satisfy." When investor analyses different companies to determine if he should buy, hold

or sell shares, he often makes use of classic valuation models as they are presented in different standard corporate finance textbooks. For our comparisons and analyses we carefully chose a few relevant standard valuation models[3] as basis for the evaluation of the financial and economic consequences of manipulation. We have chosen to stick to the fundamental analysis approach described by Stephen Penman (among others) at several occasions – but off course, other authors could have been chosen instead[4]. In Penman's "Financial Statement Analysis and Security Valuation", several different models for valuing company equity are introduced. Among these we find:

a) $V_0^E = B_o + \sum_{t=1}^{\infty} \frac{(ROCE_t - r_e) * B_{t-1}}{(1+r_e)^t}$

b) $V_0^E = \sum_{t=1}^{\infty} \frac{FCF_t}{(1+r_w)^t} - NFO_o$

c) $V_0^E = NOA_o + \sum_{t=1}^{\infty} \frac{ReOI_t}{(1+r_w)^t} - NFO_o$

Where:

V_0^E = Value of Equity (at time 0)
B_t = Book Value of Equity (at time t)
FCF_t = Free Cash Flow to company (at time t)
NFO_0 = Net Financial Obligations (at time 0)
$ReOI_t$ = Residual Operating Income (at time t)
NOA_0 = Net Operating Assets (at time 0)
$ROCE_t$ = Return on Common Equity (at time t)
r_e = equity required return (equity capital costs)

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[3] Discounted cash flow models and residual income models are used in accordance with how they are presented and described in S.H. Penman, 2013, "Financial Statement Analysis and Security Valuation", 5th ed., McGraw-Hill Irwin.

[4] I have no reason to believe that the use of another fundamental analysis approach (and author) would lead to other analyses. But, if you disagree, the please do not hesitate to contact me – I look forward to receive your call or mail.

r_w = company required return (wacc)

Usually it is assumed that book value of Net Financial Obligations is a good proxy for the net present value of the net financial activities, i.e. the market value, which makes it possible for us to use the two simplified classic valuation models b) and c) instead of a). We refer to Penman (2013) for further details regarding the models.

In Penman (2013), chapter 18, it is demonstrated how accounting manipulation, or rather earnings (accrual) management is reflected in the financial statements, and how it affects the value of a company as this is calculated by use of the different valuation models. For our use we have extended the presented approach in some appropriate examples to deal with real manipulation as well:

- Accounting manipulation, which technically is a temporary income shifting from one period to the next (few) via the balance sheet.
- Real manipulation, which technically most often (maybe always?) is (at least partly) a permanent income shifting – with or without consequences in the balance sheet.

Assume that in the basis situation where there is no manipulation, the figures simply reflect the "true" economic development in activities, revenues and costs. This leads to three comparable scenarios in each illustrative example:

1. Real or true development – leads to value V_0^E
2. Accounting manipulation – leads to value $V_0^{E\prime}$
3. Real manipulation – leads to value $V_0^{E\prime\prime}$

By use of Penman's (2013) simple example in chapter 18 (Figure 18.1, pp. 595 - 596), as well as Nike Inc. which he uses throughout the book as an illustrative example, we will challenge our research question, whether "accounting earnings manipulation

is worse than real manipulation". In fact, we will show that the Value $V_0^{E\prime\prime}$ is always smaller than the Value $V_0^{E\prime}$ (and V_0^{E}). The reason for this is that real manipulation affects the "true" (objective) development negatively.

IV. LITERATURE REVIEW AND HYPOTHESIS

As evidenced by Penman (2013), it is quite clear that due to the very structure of the accounting system as we have known it since the 15th century, manipulation of earnings by use of accounting methods or accounting estimates always leaves a trail: By the debits and credits of accounting, one cannot affect the income statement without affecting the balance sheet. Higher revenues mean for example higher receivables (an asset) or lower deferred revenues (a liability), and lower expenses mean higher prepaid expenses (an asset) or lower accrued expenses (a liability). This means that investigation of balance sheet changes provides the clues. For valuation, the focus is on operating income and, correspondingly, net operating assets, so changes in net operating assets are the focus.

In Table 2 we present the basis situation in Penman (2013), Figure 18.1, in an extended version for our purpose. The table gives Free Cash Flows (FCF), Net Operating Assets (NOA), Operating Income and Return on Net Operating Assets (RNOA) for scenarios with and without growth in Net Operating Assets. Then, within each scenario, the table depicts the accounting numbers without earnings manipulation, with accounting wise earnings manipulation and with real earnings manipulation. Based on the assumption that the company in the example do not have any net financial obligations or net financial assets; the assumption that we have a relevant required cost of capital measure, r; and the

valuation models mentioned above, we can obtain the value of the company's equity. In scenario A (and C), RNOA is constantly 12 per cent per year and growth is constantly zero respectively five per cent per year. In scenario B.1 (and D.1), the manager decides to increase Operating Income accounting wise in the current year, Year 0, by 10, which affects the balance sheet through the Net Operating Assets – and in Year 1 the amount, 10, falls back.

As an example, this could be the consequence of the assumption that the manager decides to decrease the bad-debts allowance by 10, which increase the accounts receivable (i.e. the NOA) and increases net Operating Income by 10 (debit and credit) at the end of Year 0, while the accounting transaction is reversed beginning Year 1. In scenario B.2 (and D.2), the manager again decides to increase Operating Income but this time as a real manipulation in the current year, Year 0, by 10, which affects the balance sheet through the net operating assets – but this time the amount, 10, does not fall back in Year 1, rather it has led to some permanent changes in the Operating Income, say a shift downwards to 2, as a consequence of the real changes. As an example, this could be the consequence of the assumption that the manager decides to give a "Christmas discount" of 10 at the end of Year 0, which leads to a permanently reduced future profit margin by 2 since the customers do not accept a complete reversal of the experienced price deduction.

The concrete sizes of these real changes can of course be questioned, but no matter which manipulation tool one chooses, it will be difficult to maintain the point of view that no future effect will occur.

Table 2: How Accounting Manipulation Leaves a Trail in the Balance Sheet: Six Scenarios

(We assume zero net financial obligations/assets; and required returns from operations as r = 10%)

Sc. A:	Year -3	Year -2	Year -1	Year 0	Year +1	Year +2
FCF		12.00	12.00	12.00	12.00	12.00
NOA		100.00	100.00	100.00	100.00	100.00
OI		12.00	12.00	12.00	12.00	12.00
Growth NOA			0.0%	0.0%	0.0%	0.0%
RNOA			12.0%	12.0%	12.0%	12.0%
NPV(FCF) (10%)	45.49					

Sc. B.1:	Year -3	Year -2	Year -1	Year 0	Year +1	Year +2
FCF		12.00	12.00	12.00	12.00	12.00
NOA		100.00	100.00	110.00	100.00	100.00
OI		12.00	12.00	22.00	2.00	12.00
Growth NOA			0.0%	10.0%	-9.1%	0.0%
RNOA			12.0%	22.0%	1.8%	12.0%
NPV(FCF) (10%)	45.49					

Sc. B.2:	Year -3	Year -2	Year -1	Year 0	Year +1	Year +2
FCF		12.00	12.00	12.00	10.00	10.00
NOA		100.00	100.00	110.00	110.00	110.00
OI		12.00	12.00	22.00	10.00	10.00
Growth NOA			0.0%	10.0%	0.0%	0.0%
RNOA			12.0%	22.0%	9.1%	9.1%
NPV(FCF) (10%)	42.88					

Real manipulation involve a negative effect, say 2.0

Sc. C:	Year -3	Year -2	Year -1	Year 0		
FCF		12.00	7.00	7.35	7.72	8.10
NOA		100.00	105.00	110.25	115.76	121.55
OI		12.00	12.00	12.60	13.23	13.89
Growth NOA			5.0%	5.0%	5.0%	5.0%
RNOA			12.0%	12.0%	12.0%	12.0%
NPV(FCF) (10%)	32.52					

Sc. D.1:	Year -3	Year -2	Year -1	Year 0	Year +1	Year +2
FCF		12.00	7.00	7.35	7.72	8.10
NOA		100.00	105.00	120.25	115.76	121.55
OI		12.00	12.00	22.60	3.23	13.89
Growth NOA			5.0%	14.5%	-3.7%	5.0%
RNOA			12.0%	21.5%	2.7%	12.0%
NPV(FCF) (10%)	32.52					

Real manipulation involve a negative effect, say 2.0

Sc. D.2:	Year -3	Year -2	Year -1	Year 0		
FCF		12.00	7.00	7.35	5.22	6.84
NOA		100.00	105.00	120.25	126.26	132.58
OI		12.00	12.00	22.60	11.23	13.15
Growth NOA			5.0%	14.5%	5.0%	5.0%
RNOA			12.0%	21.5%	9.3%	10.4%
NPV(FCF) (10%)	30.03					

Note: Starting point and inspiration for this presentation, please see Penman (2013), Figure 18.1, pp. 595-596.

Continuing our analyses using Penman (2013) as our technical reference point, we show our presentation and

comparison of the three scenarios by use of Nike Inc. in Table 3 since this company is used as illustrative example throughout the Penman book. Concretely we use the Table 14.2, Residual Operating Income Valuation for Nike Inc., as the basis for our comparisons similar to the Table 2 like calculations and reasoning. The table in the Penman book forms our basis for the analysis, which is exactly the scenario A in our Table 3. The scenario ends with a share value of 75.72. Please allow for rounding errors when you compare our Table 3 with Penman's equivalent table.

In scenario B in 2012E it is assumed that the manager has a strong incentive to match the RNOA in 2011E, for which reason he decides to increase Operating Income accounting wise with 184 to obtain the same RNOA in 2012E as in 2011E. This affects the balance sheet through the Net Operating Assets and in 2013E the amount, 184, falls back, and it is shown that the net value per share is unaffected since it is the same as in scenario A, i.e. a share value of 75.72.

In scenario C in 2012E it is assumed that the manager has the same strong incentive to match the RNOA in 2012E as in scenario B for which reason he decides to increase Operating Income with 184 to obtain the same RNOA in 2012E as in 2011E. However, in this scenario he does not have the option to manipulate accounting wise, for which reason he decides to perform real manipulation. This leaves him with 4 options since he can either manipulate operating costs or revenues, and these transactions can have direct effects in the balance sheet or not – see also Table 1 for suggestions for the potential corresponding accounting manipulation versus potential real manipulation actions.

As a concrete and more practical example, assume that the following four management real manipulative operating decisions/actions are considered by the manager:

C.1: Sales numbers are reached because other (and more expensive) packaging or smaller bulks were introduced at same sales prices.

Consequences:

- Income Statement: Higher future costs of goods sold.
- Balance Sheet: Higher inventory costs since it is unrealistic to expect that these extra features can always be obtained in accordance with a just-in-time principle for which reason an inventory is necessary.

C.2: Total sales numbers are reached only because cash discounts are introduced.

Consequences:

- Income Statement: Higher future net operating revenues (and sales).
- Balance Sheet: Lower net receivables due to reduced credit, but the effect is smaller than the effect on net sales, leading to a reduction in RNOA.

C.3: Sales numbers are reached because delivery terms are changed from ex warehouse to free delivery, but at same sales prices.

Consequences:

- Income Statement: Higher future costs of goods sold.
- Balance Sheet: No future direct effect.

C.4: Total sales numbers are reached only because discounts are granted (as net price reductions) was introduced.

Consequences:

- Income Statement: Higher future costs of goods sold.

- Balance Sheet: No future direct effect.

In all four situations in our scenario C it is assumed that the circa one per cent manipulation in 2012E, i.e. the 184, will effect in a real one per cent consequence change in future 2013E and 2014E for operating revenues respectively operating costs, which in all four C sub-scenarios leads to substantially lower values, i.e. share values between 68.12 and 69.37. This is considerably below scenario A's and B's 75.72. The concrete sizes of these real changes can of course be questioned, but no matter which manipulation tool management chooses, it will be difficult to maintain the point of view that no effect will occur in the future periods.

As shown in Table 2 and Table 3, the analyses of company (security) net present values reflect significant differences in the observed key financial ratios and summed outcome in the illustrative case study-based examples comparing the consequences of the two different manipulation techniques.

By conducting empirical studies and thus identifying managed accruals, some critical questions may be asked the theoretical foundation on which the conclusions regarding accounting manipulation are based since the controlled accruals is usually identified as the residual part of a regression analysis. Perhaps the results show random statistical errors in the regression analysis rather than actual accounting manipulation?[5]

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5 Assume that the customer related accounts receivable per year suddenly seems very large compared to the level they "tend" to have, which is due to a small accrual and thus a relatively large net income. In this case, management must surely be in the best position to assess whether customer receivables are expected to be received in subsequent period. If this does not happen, it is because management either: 1) have measured or assessed bad debts allowances incorrectly (an accounting error or miscalculation), 2) have made systematically

Table 3: Residual Operating Income Valuation for Nike, Inc.

Required return for operations is 9.1 per cent (Amounts in millions of dollars except per-share numbers)

Scenario A:	**2010A**	**2011E**	**2012E**	**2013E**	**2014E**
Operating revenues	19,014	20,440	21,404	22,033	22,494
Operating costs/expenses	17,200	18,490	19,362	19,931	20,348
Operating income (OI)	1,814	1,950	2,042	2,102	2,146
Net operating assets (NOA)	5,514	6,287	6,549	6,814	7,089
RNOA (%)		35.4%	32.5%	32.1%	31.5%
Residual Operating Income (ReOI)		1,448	1,470	1,506	1,526
Discount rate (1.091^t)		1.091	1.190	1.299	1.417
PV of ReOI		1,327	1,235	1,160	1,077
Total PV of ReOI	4,799				
Continuing value (CV)					31,117
PV of CV	21,963				
Enterprise value	32,276				
Book value of net financial assets	4,371				
Value of common equity	36,647				
Value per share (on 484 million shares)	**75.72**				

Scenario B:	**2010A**	**2011E**	**2012E**	**2013E**	**2014E**
Operating revenues	19,014	20,440	21,404	22,033	22,494
Operating costs/expenses	17,200	18,490	*19,178*	20,115	20,348
Operating income (OI)	1,814	1,950	2,226	1,918	2,146
Net operating assets (NOA)	5,514	6,287	*6,733*	6,814	7,089
RNOA (%)		35.4%	35.4%	28.5%	31.5%
Residual Operating Income (ReOI)		1,448	1,654	1,305	1,526
Discount rate (1.091^t)		1.091	1.190	1.299	1.417
PV of ReOI		1,327	1,389	1,005	1,077
Total PV of ReOI	4,799				
Continuing value (CV)					31,117
PV of CV	21,963				
Enterprise value	32,276				
Book value of net financial assets	4,371				
Value of common equity	36,647				
Value per share (on 484 million shares)	**75.72**				

Accounting manipulation 184 for obtaining target, that RNOA(2012) = RNOA(2011)

Scenario C.1:	**2010A**	**2011E**	**2012E**	**2013E**	**2014E**
Operating revenues	19,014	20,440	21,404	22,033	22,494
Operating costs/expenses	17,200	18,490	*19,178*	20,130	20,551
Operating income (OI)	1,814	1,950	2,226	1,903	1,943
Net operating assets (NOA)	5,514	6,287	*6,733*	6,998	7,273
RNOA (%)		35.4%	35.4%	28.3%	27.8%
Residual Operating Income (ReOI)		1,448	1,654	1,290	1,306
Discount rate (1.091^t)		1.091	1.190	1.299	1.417
PV of ReOI		1,327	1,389	993	922
Total PV of ReOI	4,632				
Continuing value (CV)					26,626
PV of CV	18,794				
Enterprise value	28,939				
Book value of net financial assets	4,371				
Value of common equity	33,310				
Value per share (on 484 million shares)	**68.82**				

Real manipulation involve a negative effect, say 1 per cent cost increase

misleading accounting estimates, or 3) have not been able to foresee changes in underlying economic conditions (i.e. made an economically correct accrual).

Scenario C.2:	**2010A**	**2011E**	**2012E**	**2013E**	**2014E**
Operating revenues	19,014	20,440	*21,588*	21,812	22,269
Operating costs/expenses	17,200	18,490	19,362	19,931	20,348
Operating income (OI)	1,814	1,950	2,226	1,882	1,921
Net operating assets (NOA)	5,514	6,287	*6,733*	6,998	7,273
RNOA (%)		35.4%	35.4%	27.9%	27.5%
Residual Operating Income (ReOI)		1,448	1,654	1,269	1,284
Discount rate (1.091^t)		1.091	1.190	1.299	1.417
PV of ReOI		1,327	1,389	977	906
Total PV of ReOI	4,601				
Continuing value (CV)					26,188
PV of CV	18,485				
Enterprise value	28,599				
Book value of net financial assets	4,371				
Value of common equity	32,970				
Value per share (on 484 million shares)	**68.12**				

Real manipulation involve a negative effect, say 1 per cent revenue decrease

Scenario C.3:	**2010A**	**2011E**	**2012E**	**2013E**	**2014E**
Operating revenues	19,014	20,440	21,404	22,033	22,494
Operating costs/expenses	17,200	18,490	*19,178*	20,130	20,551
Operating income (OI)	1,814	1,950	2,226	1,903	1,943
Net operating assets (NOA)	5,514	6,287	6,549	6,814	7,089
RNOA (%)		35.4%	35.4%	29.1%	28.5%
Residual Operating Income (ReOI)		1,448	1,654	1,307	1,322
Discount rate (1.091^t)		1.091	1.190	1.299	1.417
PV of ReOI		1,327	1,389	1,006	933
Total PV of ReOI	4,657				
Continuing value (CV)					26,968
PV of CV	19,035				
Enterprise value	29,205				
Book value of net financial assets	4,371				
Value of common equity	33,576				
Value per share (on 484 million shares)	**69.37**				

Real manipulation involve a negative effect, say 1 per cent cost increase

Scenario C.4:	**2010A**	**2011E**	**2012E**	**2013E**	**2014E**
Operating revenues	19,014	20,440	*21,588*	21,812	22,269
Operating costs/expenses	17,200	18,490	19,362	19,931	20,348
Operating income (OI)	1,814	1,950	2,226	1,882	1,921
Net operating assets (NOA)	5,514	6,287	6,549	6,814	7,089
RNOA (%)		35.4%	35.4%	28.7%	28.2%
Residual Operating Income (ReOI)		1,448	1,654	1,286	1,301
Discount rate (1.091^t)		1.091	1.190	1.299	1.417
PV of ReOI		1,327	1,389	990	918
Total PV of ReOI	4,625				
Continuing value (CV)					26,530
PV of CV	18,726				
Enterprise value	28,865				
Book value of net financial assets	4,371				
Value of common equity	33,236				
Value per share (on 484 million shares)	**68.67**				

Real manipulation involve a negative effect, say 1 per cent revenue decrease

Note: Starting point and inspiration for this presentation, please see Penman (2013), Table 14.2, pp. 441 (and Exh. 10.9, p.311).

One can also note that despite all concerns about the apparently widespread earnings management, a number of studies show that investors consider net accounting income to be value-relevant, and even more informative than pure cash flow data. This is actually the conclusion of many studies over a long period of time and partly documented in several different countries. In other words, there is nothing that suggests that investors consider the postulated earnings management as a big problem, and generally they do not consider accounting data as unreliable. This interpretation is supported by, among others, a study by Dechow (1994) which concluded that current net income numbers are better at predicting size on future cash flows than the current cash flow.

Furthermore, there can be no doubt that if it really is fraudulent financial reporting the many findings show so clearly with simple models, then the user of accounting information also could account for it in his application of the financial statements information. One can then question whether what we see is in fact manipulation when it is so relatively easy to detect. Sloan (1996) conducted a survey of investor equity returns in relation to fraudulent financial reporting. Based on the split of the accounting net income into cash flows and accruals, Sloan demonstrated that abnormal stock returns are negative for companies whose earnings include a relatively large part of net accruals, and positive for companies with a low accruals part. Xie (2001) builds on Sloan (1996) and he shows that these results are largely due to secondary effects of abnormal accruals rather than normal accruals. Xie (2001) also shows that these accruals are consistent with typical incentives for earnings management, while Sun (2003) shows that

this becomes even more evident if one separates companies into two groups with positive respectively negative results.

However, in a subsequent study by Fairfield et al (2003) it is demonstrated that this difference between the accounting net income's cash flow and accruals part perhaps reflects a more general marginal negative correlation between the accounting rate of return on a one-year term and growth in working capital. To the extent that there seems to be lack of stability in the accruals as a result of growth in working capital, this will result in less net accounting income when companies practice conservative accounting methods, rather than it is an expression of earnings management. This is, by the way, in compliance with the above outlined concern about the equating of accounting manipulation and a residual of a regression analysis.

So, we have indications that investors see through earnings management, but apparently there is doubt. Even if one, theoretically, eliminated all possibilities of accounting manipulation, the incentives to manipulate the numbers would not be removed. If one adopts a strictly critical attitude towards all these studies, one can contrast the results found and conclude that the many studies at least represent a confirmation of the average management incentive to manipulate (a little) with the numbers to the extent this can be done (within the law and regulation framework). However, if these possibilities are (further) reduced, it is an open question whether the incentives are so strong that management will find other ways to achieve their goals, such as to start working seriously with the real activities manipulation.

This raises the question whether managing earnings through accounting earnings management methods is ethically acceptable? The question was asked to a sample group of

management accountants in a number of studies, and the response to the survey was enlightening. Bruns & Merchant (1990) showed that managers disagreed extensively on whether earnings management is ethically acceptable. They also found that in general, the respondents thought manipulating earnings via operating decisions was more ethically acceptable than manipulation by accounting methods. Bruns & Merchant were disturbed by these findings since they were concerned that these practices could be misleading to users of the information and, over time, reduce the credibility of accounting numbers and thereby damage the reputation of the accounting profession.

In psychology and in organizational behaviour it has been demonstrated that individuals make egocentric interpretations of fairness and ethics. In situations such as when earnings are managed where no consensus on acceptable behaviour exists, multiple interpretations of ethical actions are likely to arise, and the result is often contended to be that interpretations will be self-serving. That is, individuals who benefit from an unethical or questionable act will not assess the act negatively like other individuals who are not benefiting from the act.

In a more recent survey of top executives, Graham et al (2005) provide evidence suggesting that managers prefer real earnings management activities compared to accrual-based earnings management. This is the case because real management activities are less likely to be scrutinized by auditors and regulators, and thus potentially have a greater probability of not being detected, although the consequences of such activities can be economically significant to the company. Moreover, consistent with the conjectures made by Graham et al (2005), Cohen et al (2008) find that managers have shifted away from accrual to real

earnings management in the post Sarbanes-Oxley Act period. The need to avoid detection of accrual-based earnings management is greater than in previous periods, inducing managers to shift from accrual-based to real earnings management activities.

By continuing to tighten the financial regulation and hence, in a larger extent, more comprehensive and more detailed rules on how to report this and that, combined with fewer choices and reduced room for manoeuver, the consequence will be that management will be precluded from using essential communication options. Ultimately, the company will only be allowed to report cash flows (plus some "mechanical" changes in balance sheet receivables/payables, leading to corresponding reported "mechanical" net accrual amount). If reporting (manipulated?) cash flows is the only option, the financial statements do not reflect management's expectations, which will provide loss of information for the accounting information reader. It is therefore a highly relevant question whether earnings management in a dynamic society is necessarily bad. Since manipulation is apparently so easy to detect, it follows that overall people should not be cheated by the earnings management. Accordingly, earnings management should not necessarily be considered an unpleasant or shady phenomenon, but rather as reflecting a responsible management's attempt to manoeuver a business through a changing world in the best possible way. Consequently, fraudulent reporting where some users are misled should then instead be opposed by (even more) transparency and tightened personal responsibility for the people constituting the company's management.

Rigid accounting standards, which prevent companies from disclosing what happens by letting management include some

private information when the financial consequences of real activities are disclosed, should be avoided. It should be remembered that *truth* is not financial reporting's ultimate objective. According to the IASB and FASB framework decision, usefulness is a key objective, which implies that the reporting is not "false", "misleading" or "fraudulent" rather than specifically expressing the explicit truth. Thus, it can be argued that somewhat fraudulent financial reporting, as such, should be accepted, because although it is prima facie unethical to present, this will, in the longer run, often prove the wisest to do.

V. CONCLUSION

In this light, one should probably take more interest in how the accounting earnings management process takes place in response to the underlying economic and business realities. Hereby, the focus will be on how to avoid the overtly criminal incurring actions where a number of stakeholders in the company's environment are systematically cheated or deceived, instead of having focus on different (random) tightening of the financial regulation. Indeed, there can be no doubt that a stronger regulation will result in a reduction of the financial report's (i.e. management's) ability to communicate information about the company's financial position, which will have the ultimate consequence that the company's management, insofar as it wants to show a given accounting information, may feel compelled to make effective real manipulation of the underlying economic activities, rather than simply manipulating some accounting numbers.

It follows that management's focus might be turned off to make economically optimal decisions. However, this will probably be much more difficult to observe, and thus take into account for

which reason it might be even more damaging to the company's stakeholders, than the contrary as has been shown.

Transparency entails increased importance for the accounting user, the investor, to determine if there has been (any) accounting manipulation or not. But perhaps it would be even more appropriate in a severe situation, if management is formally equipped with greater personal responsibility, commitment and liability.

If things go wrong, it is probably most often possible for authorities to identify whether management has exercised earnings management by reviewing relevant material and thereby uncover changes in opinions and estimates and/or changes in trade patterns and attitudes with customers and/or suppliers, changes in relevant internal administrative procedures, and the like.

Centrally, it therefore only remains to make an active decision as to whether accounting earnings management should be acceptable, despite it is clearly unethical. Just as in traffic where most people accept that some might not park legally or pass on the inside where it is not allowed, or do not respect a red light, simply because it all seems to run more smoothly due to these offenses.

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