Chapter 11 AND 17

FINANCIAL REPORTING QUALITY AND EARNINGS QUALITY

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LEARNING OUTCOMES

- distinguish between financial reporting quality and quality of reported results (including quality of earnings, cash flow, and balance sheet items);
- describe a spectrum for assessing financial reporting quality;
- distinguish between conservative and aggressive accounting;
- describe motivations that might cause management to issue financial reports that are not high quality;
- describe conditions that are conducive to issuing low-quality, or even fraudulent, financial reports;
- describe accounting methods (choices and estimates) that could be used to manage earnings, cash flow, and balance sheet items;
- describe accounting warning signs and methods for detecting manipulation of information in financial reports.
- describe the indicators of cash flow quality and balance sheet quality.
- describe the concept of earnings quality in academic literature.

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FINANCIAL REPORTING QUALITY VERSUS QUALITY OF REPORTED RESULTS

Financial Reporting Quality

- The quality of information in financial reports including disclosures in notes
  - Decision-useful information
  - Faithful representation of economic reality
  - Compliant with standards

- High Financial Reporting Quality: financial reports contain information that is *relevant*, *neutral*, *and free from errors*.

  to decision making

Quality of Reported Results (aka "Earnings Quality")

- The earnings and cash generated by the company's economic activities and financial condition.
  - Sustainable activity
  - Adequate returns

FINANCIAL REPORTING QUALITY AND EARNINGS QUALITY ARE INTERRELATED

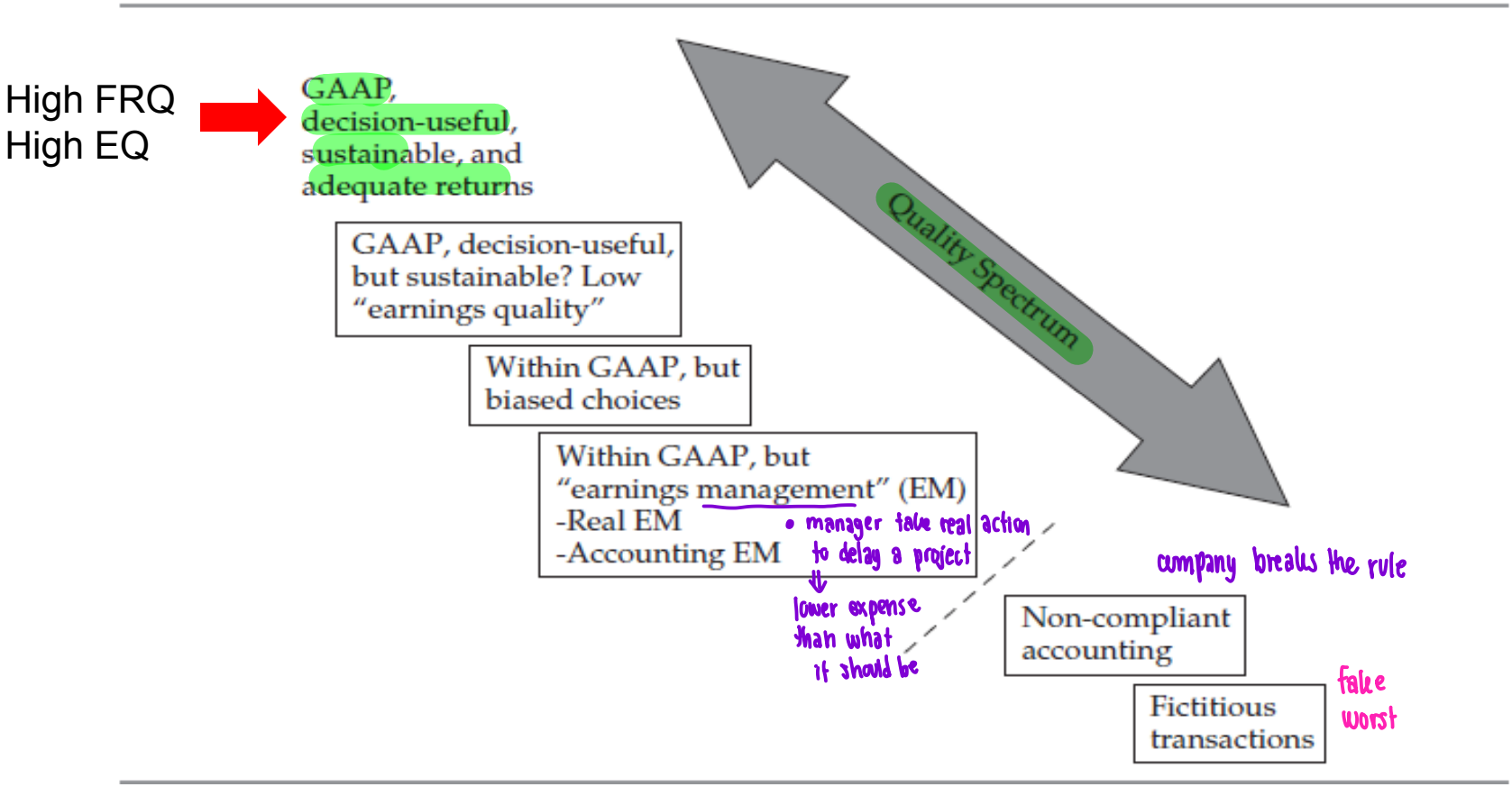
Firm-specific information risk cannot be diversified away and thus is priced by investors and affects the firm's cost of equity.
e.g., Easley and O'Hara, 2004; Leuz and Verrecchia, 2004)
Better accounting information reduces information risk and thereby reducing the firm's cost of capital. ↳ cannot be diversify!!

		Financial Reporting Quality	
		Low	High
Earnings (Results) Quality	High	/access hard to know whether the quality of earnings is good or not ↑ LOW financial reporting quality impedes assessment of earnings quality and impedes valuation.	HIGH financial reporting quality enables assessment. HIGH earnings quality increases company value.
	Low		HIGH financial reporting quality enables assessment. LOW earnings quality decreases company value.

To analyze the quality of financial reports, consider two questions:

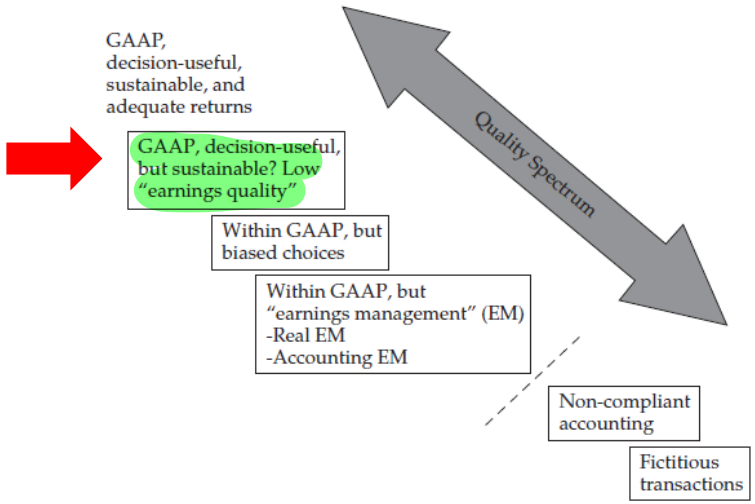
1. Are the financial reports GAAP-compliant and decision-useful?
2. Are the earnings of high quality? In other words, do they provide an adequate level of return, and are they sustainable?

QUALITY SPECTRUM OF FINANCIAL REPORTS



QUALITY SPECTRUM OF FINANCIAL REPORTS

Information complied with GAAP but may not be sustainable



High FRQ & Low EQ

Low EQ: earnings are not sustainable because of

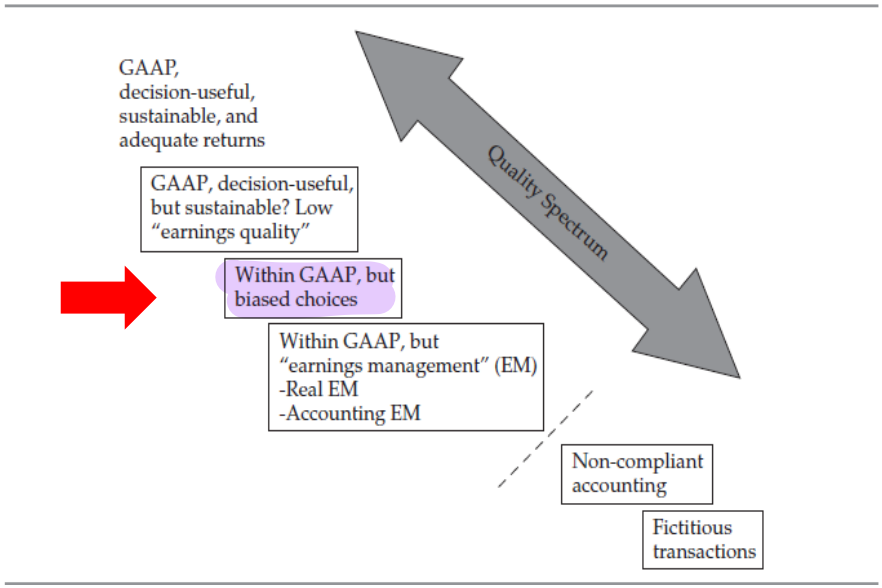
- Non-recurring items, and/or
- Insufficient return on investment to sustain the company

Excerpt from Toyota Motor Corporation's Consolidated Financial Results

"Consolidated **vehicle unit sales** in Japan and overseas **decreased** by 37 thousand units, or 1.6%, to 2,232 thousand units in FY2014 first quarter …compared with FY2013 first quarter…

"…**operating income increased** by ¥310.2 billion, or 87.9%, to ¥663.3 billion in FY2014 first quarter compared with FY2013 first quarter. The factors contributing to an increase in operating income were the effects of **changes in exchange rates** of ¥260.0 billion...

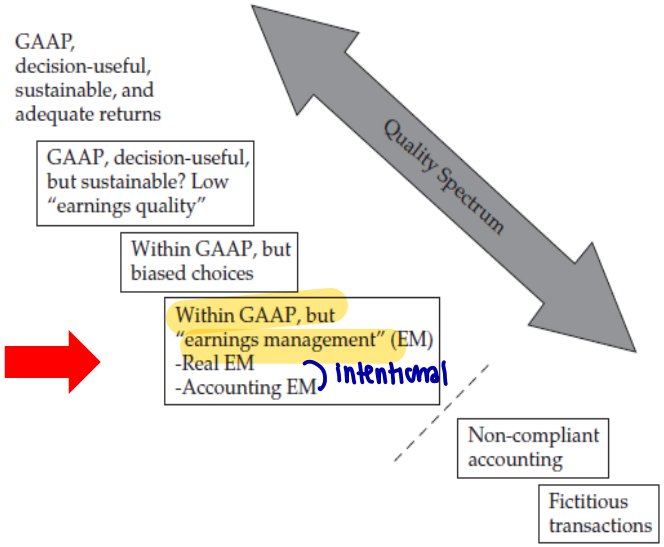
QUALITY SPECTRUM OF FINANCIAL REPORTS: BIAS



biase the result

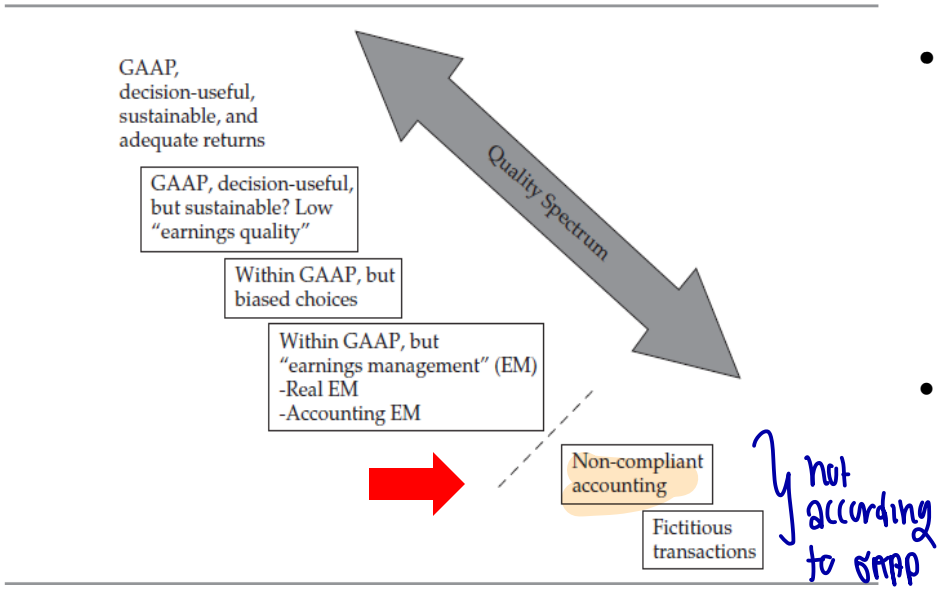
1. Biased accounting choices, assumptions, estimates:
   - "Aggressive" choices increase a company's reported performance and financial position in the current period. E.g. low estimates of bad debt.
   - "Conservative" choices decrease current reported performance but may increase future reported.
2. Biased presentation choices:
   - Obscure unfavorable information and/or
   - Emphasize favorable information.

QUALITY SPECTRUM OF FINANCIAL REPORTS: EARNINGS MANAGEMENT



- Earnings management: deliberate actions to influence reported earnings. (Making *intentional* choices that create biased financial reports)
- Real earnings management, for example: defer R&D expenses into the next quarter in order to meet earnings targets.
- Accounting earnings management ("accrual-based earnings management"), for example: change accounting estimates in order to meet earnings targets.

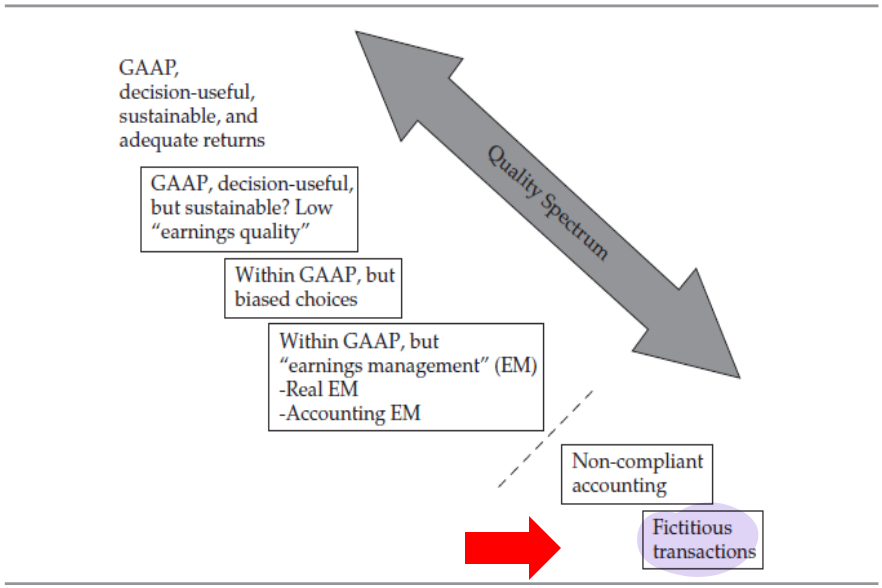
QUALITY SPECTRUM OF FINANCIAL REPORTS: NONCOMPLIANT ACCOUNTING



- WorldCom (2002) capitalized certain expenditures to understate expenses and thus overstate earnings and operating cash flow.
- New Century Financial (2007) reserved minimal amounts for loan repurchase losses for subprime mortgages.

For example, recognize revenue too early and manipulate the timing of expense to report good performance.

QUALITY SPECTRUM OF FINANCIAL REPORTS: FICTITIOUS TRANSACTIONS



- fake
  Fraudulent reporting
- Equity Funding Corp. (1970s) created fictitious revenues and even fictitious policy holders.
- Crazy Eddie's (1980s) reported fictitious inventory as well as fictitious revenues supported by fake invoices.
- Parmalat (2004) reported fictitious bank balances.

ASSESSING QUALITY OF FINANCIAL REPORTS

High/low financial reporting quality? High/low earnings quality?

1. ABC Co.'s 2018 earnings totaled $233 million, including a $100 million gain from selling one of its less profitable divisions. ABC's earnings for the prior three years totaled $120 million, $107 million, and $111 million. The company's financial reports are extremely clear and detailed, and the company's earnings announcement highlights the one-time nature of the $100 million gain. low earning quality ; income came from non-recurring income | High financial reporting quality
2. DEF Co. discloses that in 2018, it changed the depreciable life of its equipment from 3 years to 15 years. Equipment represents a substantial component of the company's assets. The company's disclosures indicate that the change is permissible under the accounting standards of its jurisdiction but provide only limited explanation of the change. don't know income
   low financial reporting → don't tell why change → hard to tell the quality of earning
3. GHI Co.'s R&D expenditures for the past five years have been approximately 3% of sales. In 2018, the company significantly reduced its R&D expenditures. Without the reduction in R&D expenditures, the company would have reported a loss. No explanation is disclosed.
   low financial reporting quality & earning quality

MOTIVATIONS POTENTIALLY ASSOCIATED WITH LOW FINANCIAL REPORTING QUALITY

hide

- Mask poor performance (e.g., declining profitability or lower profitability than competitors).
- Meet or beat market expectations (e.g., analysts' forecasts and/or management's guidance).
  - Increase stock price, if only temporarily.
  - Increase credibility with market participants.
- Increase compensation that is linked to reported earnings.
- Avoid violation of debt covenants.

SURVEY: FACTORS DRIVE REPORTED EARNINGS AND DISCLOSURE DECISIONS

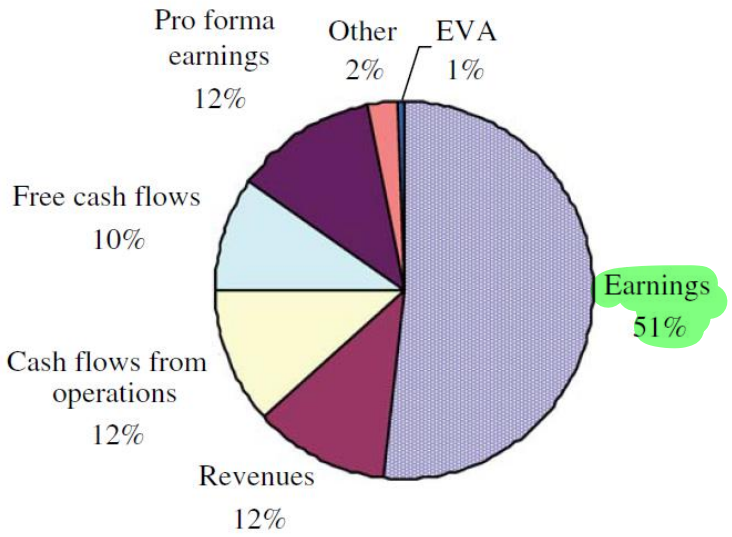


Fig. 2. Responses to the question: "Rank the three most important measures report to outsiders" based on a survey of 401 financial executives.

- CFO believes that earnings, not cash flows, are the key metric considered by outsiders.
- Two most important earnings benchmarks: same quarter last year EPS and analyst consensus estimates of expected EPS for current quarter

↳ manager want to beat this expected EPS

Graham, J.R., Harvey, C.R. and Rajgopal, S., 2005. The economic implications of corporate financial reporting. *Journal of accounting and economics*, *40*(1-3), pp.3-73.

Firm tries to meet expectations of analysts and investors.

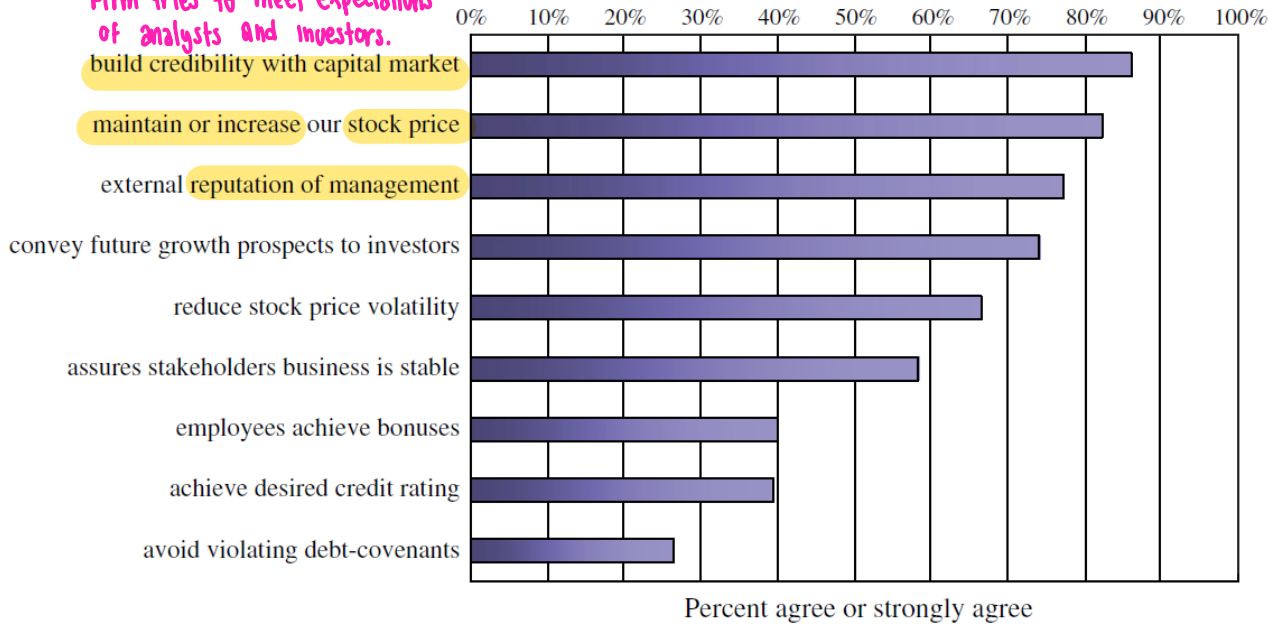
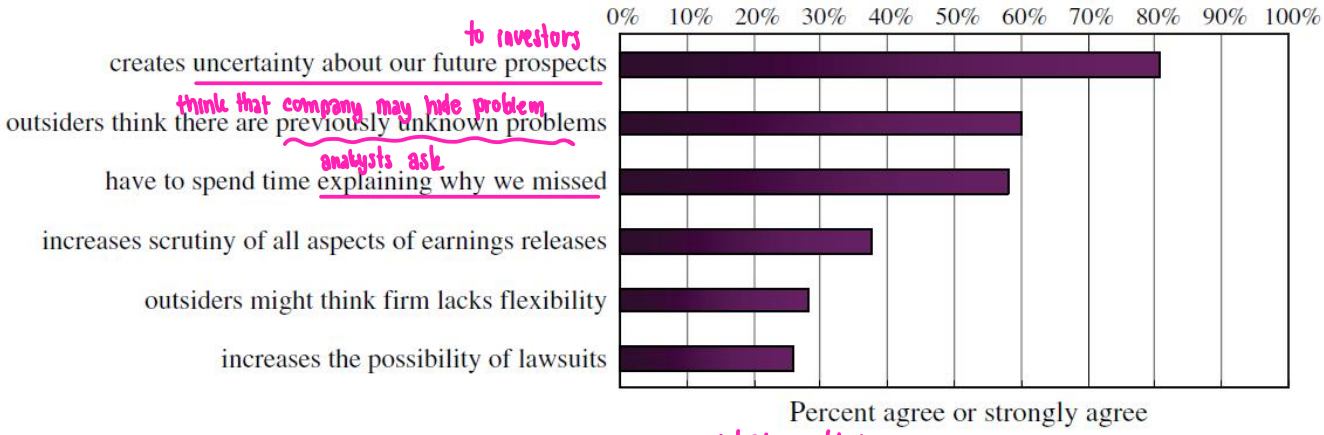


Fig. 3. Responses to the question: "Meeting earnings benchmarks helps…" based on a survey of 401 financial executives.

to investors

think that company may hide problem

analysts ask



what would happen!

Fig. 4. Responses to the question: "Failing to meet benchmarks…" based on a survey of 401 financial executives.

Graham, J.R., Harvey, C.R. and Rajgopal, S., 2005. The economic implications of corporate financial reporting. *Journal of accounting and economics*, *40*(1-3), pp.3-73.

MEETING THE DESIRED EARNINGS TARGET

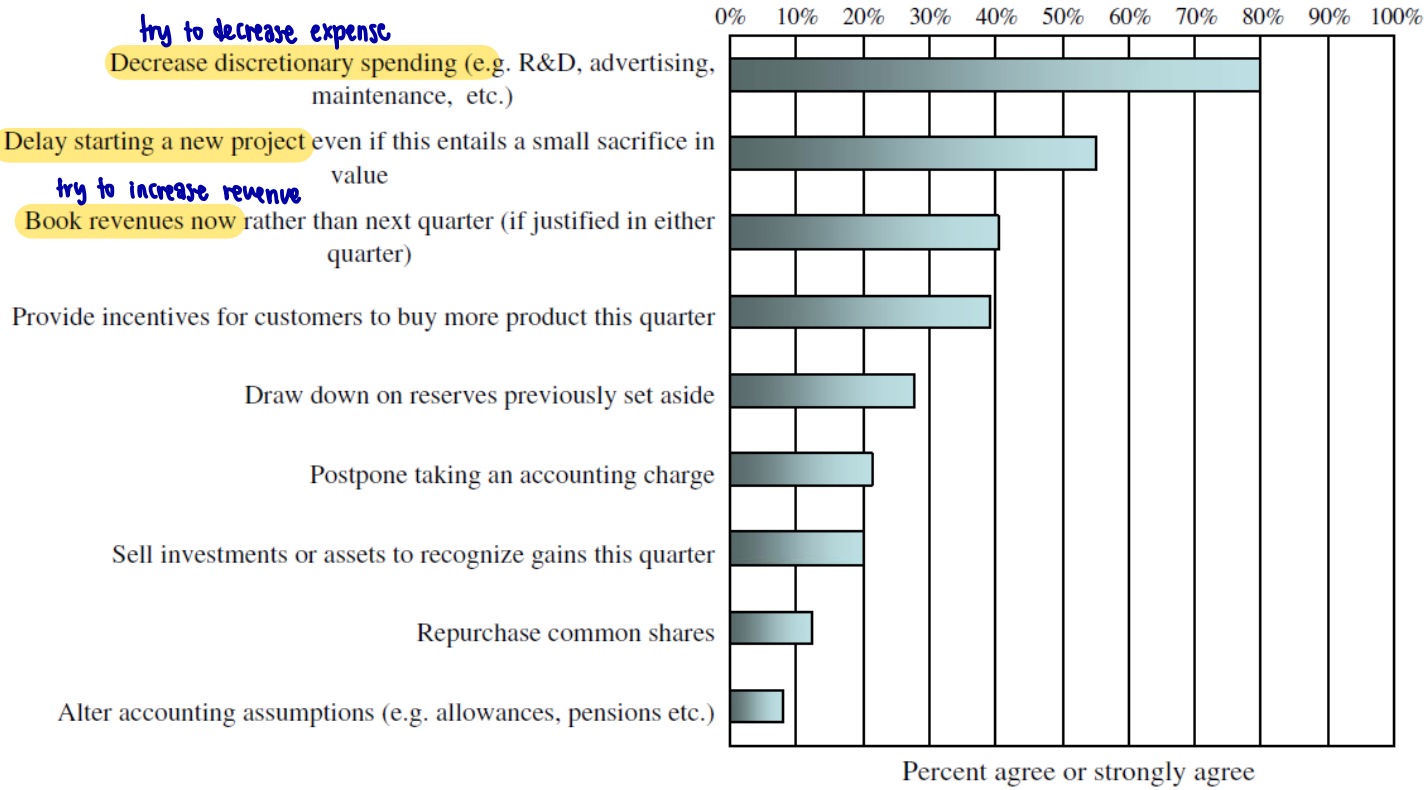


Fig. 5. Responses to the question: "Near the end of the quarter, it looks like your company might come in below the desired earnings target. Within what is permitted by GAAP, which of the following choices might your company make?" based on a survey of 401 financial executives.

benchmark

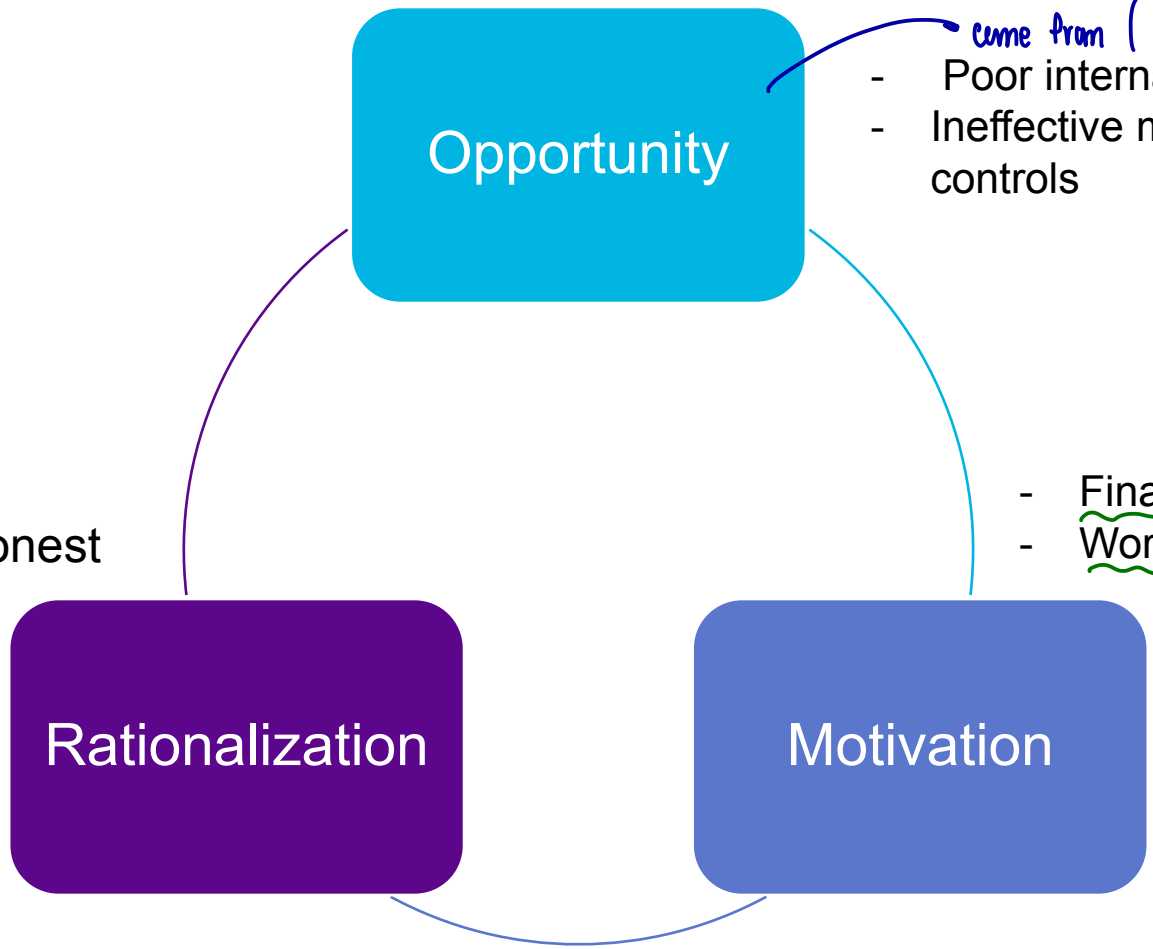
Graham, J.R., Harvey, C.R. and Rajgopal, S., 2005. The economic implications of corporate financial reporting. *Journal of accounting and economics*, *40*(1-3), pp.3-73.

CONDITIONS CONDUCIVE TO ISSUING LOW-QUALITY FINANCIAL REPORTS

can do fraud

allow 1 employee to do many responsibilities

come from



- Poor internal control
- Ineffective monitoring of controls

- Financial pressure
- Work pressure

E.g. STARK

CFO has 2 options

he chose this

- follow CEO to do fraud
- leave the company

- Justify dishonest actions

like "it's not wrong, it still in the GAAP"

COMPANIES' PRESENTATION CHOICES

- What information to present—beyond required disclosures?
  - Operating metrics
  - Pro forma measures (a.k.a. non-GAAP or non-IFRS measures)
- How to present the information?
  - Emphasize the positive aspects of performance.
  - Include "boilerplate" and excessive or irrelevant detail.
- Some requirements of the use of non-GAAP/non-IFRS measures

US GAAP	IFRS
Define non-GAAP measures tell investors ?	Define non-IFRS measures
Explain why non-GAAP measures provide meaningful information to make investment decision	Explain why non-IFRS measures is relevant to users
How each company derives to non-GAAP number Reconcile non-GAAP measures to most comparable GAAP measures	Reconcile non-IFRS measures to IFRS measures require only 1 year, no need to tell comparison
at least compare with last year Display comparable GAAP measure with equal prominence ↳ investors can tell whether it consistent or not	

PRESENTATION CHOICES: GROUPON'S NON-GAAP METRIC (IPO)

want to do IPO

Originally Shown (June S-1 filing)

adjusted

cannot be deducted

very typical operating expense

(in $ thousands)	Year Ended December 31, 2008	2009	2010
(Loss) Income from operations	(1,632)	(1,077)	(420,344)
Adjustments:			
Online marketing	162	4,446	241,546
Stock-based compensation	24	115	36,168
Acquisition-related	—	—	203,183
Total adjustments	186	4,561	480,897
Adjusted CSOI	(1,446)	3,484	60,553

non-recurring → firm though it can be removed

non-GAAP reconcile

After SEC's Review (November S-1 filing)

(in $ thousands)	Year Ended December 31, 2008	2009	2010
Loss from operations	(1,632)	(1,077)	(420,344)
Adjustments:			
Stock-based compensation	24	115	36,168
Acquisition-related	—	—	203,183
Total adjustments	24	115	239,351
CSOI	(1,608)	(962)	(180,993)

Groupon's response: *"the marketing costs were similar to acquisition costs, not recurring costs"*

ACCOUNTING CHOICES AND THEIR EFFECTS ON EARNINGS AND BALANCE SHEETS

Choices exist among accounting methods and estimates, including the following:

- Revenue recognition
  - Timing
  - Amounts
- Expense recognition
  - Inventory cost flow
  - Capitalizing versus expensing
  - Depreciation method and estimates
  - Allowances for realization of assets

ACCOUNTING CHOICES: INVENTORY COST FLOW ASSUMPTIONS

① Specific identification: each inventory has its own cost, cannot be averaged ⇒ e.g. อินวรรณ์ใบ
very unique

- Trade-offs exist, and investors should be aware of how accounting choices affect financial reports.

e.g. Now, there's high inflation
↳ ending inventory from FIFO is higher than weighted-average
→ COGS from FIFO is lower than "
includes older cost (lower cost)

② • FIFO (first-in-first-out) cost assumption:
  - More current costs are included in ending inventory on the balance sheet.
  - Older costs are included in cost of sales on the income statement.

③ • Weighted-average cost assumption:
  - A blend of old and new costs in inventory on the balance sheet—not as current as with FIFO.
  - A blend of old and new costs in cost of sales on the income statement—more current than with FIFO.

ACCOUNTING CHOICES: INVENTORY COST FLOW ASSUMPTIONS EXAMPLE (1 OF 2)

	Units	Cost per Unit	Total Cost
Purchase 1	5	$100	$500
Purchase 2	5	150	750
Purchase 3	5	180	900
Purchase 4	5	200	1,000
Purchase 5	5	240	1,200
Cost of goods available for sale			$4,350

Good available for sale
↳ whole value of ending inventory if firm didn't sell any inventory

A company starts operations with no inventory at the beginning of a fiscal year and makes five purchases of goods for resale, as shown in the table. During the period, the company sells, at $250 each, all of the goods purchased except for five units. five remaining in the stock

What are the **ending inventory** and **cost of goods sold** if the company uses the **FIFO** method of inventory costing?

COGS = 4,350 - 1,200 = 3,150

Ending inventory = 1,200

ACCOUNTING CHOICES: INVENTORY COST FLOW ASSUMPTIONS EXAMPLE (2 OF 2)

	Units	Cost per Unit	Total Cost
Purchase 1	5	$100	$500
Purchase 2	5	150	750
Purchase 3	5	180	900
Purchase 4	5	200	1,000
Purchase 5	5	240	1,200
Cost of goods available for sale			$4,350

A company starts operations with no inventory at the beginning of a fiscal year and makes five purchases of goods for resale, as shown in the table. During the period, the company sells all of the goods purchased except for five units.

What are the **ending inventory** and **cost of goods sold** if the company uses the **weighted-average** method of inventory costing?

Average cost per piece = $\frac{4,350}{25}$ = $174

Ending inventory = 5 x 174 = $ 870

COGS = 20 x 174 = $ 3,480

ACCOUNTING CHOICES: INVENTORY COST FLOW ASSUMPTIONS EXAMPLE (6 OF 6)

first purchased at lower price → low cogs will be sold first

recent purchase has higher price

Cost Flow Assumption	FIFO	Weighted Average
Cost of goods available for sale	$4,350	$4,350
Ending inventory (5 units)	(1,200)	(870)
Cost of goods sold	$3,150	$3,480
Sales	$5,000	$5,000
Cost of goods sold	3,150	3,480
Gross profit	$1,850	$1,520
Gross profit margin	37.0%	30.4%

firm choose which one depends on which one suit their products more

make sense for business that sell products those can be expired

product cannot be expired

firm can change method but has to give reason

have to restate the performance of previous years in new standard too.

maintenance expenses are include if it is big maintenance & can prolong useful life

ACCOUNTING CHOICES: DEPRECIATION

systemmatic way to record the expense of PPE

- Depreciation is a reduction in the value of an asset.
- Methods: straight-line basis, accelerated method, activity-based method

suitable for manufacturing firm

don't reflect real economic

- **Straight-line method** easiest way
  - Depreciation = (Cost – Salvage value)/useful life
- **Accelerated method**

ตัวๆปี depreciate เยอะ

e.g. electronic component

Huge depre in early year

  - Double-declining balance:
    - Depreciation rate = (1/useful life)*2
    - Depreciation = Balance*depreciation rate

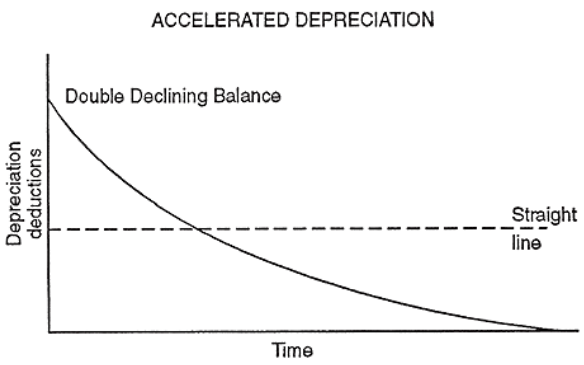


FIGURE 1

- **Activity-based method**
  - Units-of-production:
    - Depreciation = depreciation expense per unit*actual units produced

ANALYTICAL PROCEDURES TO DETECT WARNING SIGNS: REVENUE RECOGNITION (1 OF 2)

*Examine **the accounting policies** note for a company's revenue recognition policies.*

- Consider whether the policies make it easier to prematurely recognize revenue
  - Recognizing revenue immediately upon shipment of goods
  - Bill-and-hold arrangements (revenue is recognized before goods are shipped)
- Consider estimates and judgments required by the policies
  - Rebate programs involve many estimates (check assumptions if provided)
  - Multiple-deliverable arrangements require allocation of revenue and timing of revenue recognition for each item or service

ANALYTICAL PROCEDURES TO DETECT WARNING SIGNS: REVENUE RECOGNITION (2 OF 2)

Look at revenue relationships.

- Compare a company's revenue growth with its primary competitors or its industry peer group and understand the reasons for major differences.
  - Superior management or products and services?
  - Revenue quality?
- Compare accounts receivable with revenues:
  - Examine the trend in receivables as a percentage of total revenues.
  - Examine the trend in receivables turnover for unusual changes and seek an explanation if they exist.
  - Compare a company's days sales outstanding (DSO) or receivables turnover with that of relevant competitors or an industry peer group.
- Examine asset turnover (sales/average assets: asset utilization in generating revenue).

SUMMARY OF ANALYSTS' CONSIDERATIONS: INVENTORY METHODS

- Costing Method compared with competitors'
- Reserves for obsolescence → high obsolescence in inventory → not good

compare with your peer

ANALYTICAL PROCEDURES TO DETECT WARNING SIGNS: INVENTORY

Look at inventory relationships.

- Compare a company's inventory growth—relative to sales growth—with its primary competitors or its industry peer group and understand the reasons for major differences.
- Examine trend in inventory turnover:
  - Poor inventory management?
  - Obsolescence? Future write-offs?
  - Overstated current gross and net profits?

SUMMARY OF ANALYSTS' CONSIDERATIONS: LONG-LIVED ASSETS

PPE

paper
" missing R&D expenditure "

- Estimated life spans compared with others in the same industry
- Changes in depreciable lives
- Asset write-downs
- Policies compared with competitors
- Capitalization (R&D capitalized? US GAAP vs IFRS)

R&D is important for
tech & healthcare company
analysts want to know this
but companies don't want to disclose it
don't want their competitors to know

accounting wants certainty

as asset capture future benefit

uncertainty
we don't know the benefit from R&D

always expense

if meet certain criteria
can partially capitalize R&D expense

ANALYTICAL PROCEDURES TO DETECT WARNING SIGNS: LONG-LIVED ASSETS

- Examine the company's accounting policy note for its capitalization policy for long-term assets, including interest costs, and for its handling of other deferred costs.
- Compare the company's policy with industry practice.
- If the company's policy is an outlier, cross-check asset turnover and profitability margins with others in the industry.

ANALYTICAL PROCEDURES TO DETECT WARNING SIGNS: OPERATING CASH FLOW VERSUS NET INCOME

from operating

easier to manipulate

- Pay attention to the relationship of cash flow and net income.
- If net income is consistently higher than operating cash flow, it can signal accrual accounting policies that shift revenue to current period and/or current expenses to later periods.

net income > cash flow

- Construct a time series of cash generated by operations divided by net income. If the ratio is consistently below 1.0 or has declined repeatedly, there may be problems in the company's accrual accounts.

ANALYTICAL PROCEDURES TO DETECT WARNING SIGNS: ALLOWANCES

Examine allowances for which estimates can impact earnings, for example:

- Accounts receivable – allowance for doubtful accounts:
  - Examine changes in allowances as a percentage of the asset account. account receivable
  - Collection experience.

ALLOWANCE FOR BAD DEBT

". . . Generally, UAP's policy required that accounts which were past due between 90 days and one year should be reserved at 50%, and accounts over one year past due were to be reserved at 100%.

record allowance 100% as expenses

. . . In FY 1999 and continuing through FY 2000, UAP had substantial bad debt problems. In FY 2000, certain former UAP senior executives were informed that UAP needed to record an additional $50 million of bad debt expense. . . .just prior to the end of UAP's FY 2000, the former UAP COO (chief operating officer), in the presence of other UAP employees, ordered that UAP's bad debt reserve be reduced by $7 million in order to assist the Company in meeting its PBT target for the fiscal year. . . At the end of FY 2000, former UAP senior executives reported financial results to ConAgra which they knew, or were reckless in not knowing, **overstated UAP's income before income taxes because UAP had failed to record sufficient bad debt expense**."

to lower record

pressure from market

SEC Accounting and Auditing Enforcement Release

OTHER POTENTIAL WARNING SIGNS: AREAS THAT *MIGHT* SUGGEST FURTHER ANALYSIS

- Depreciation methods and useful lives compared with those of its peers.

  ↳ a lot of pressure around 4th quarter → boom to beat benchmark
- Fourth-quarter surprises routinely occurring.
- Presence of related-party transactions.

  → STARK collaborate with subordinate companies to do fraud

  CEO & CEO of subsidiaries know

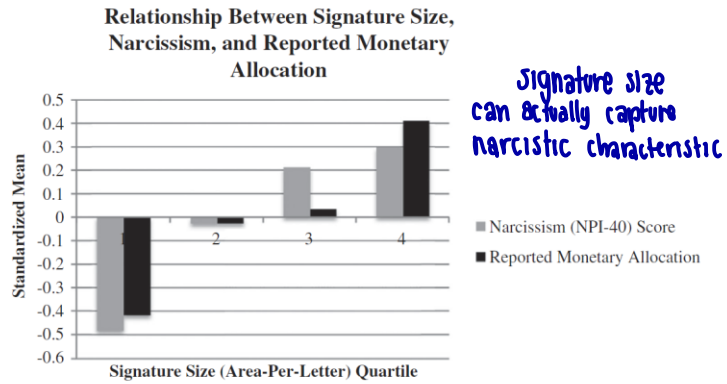
  ↳ can look into seperate FS of listed company
- Nonoperating income or one-time sales included in revenue, instead of other income.
- Classification of expenses as "nonrecurring."
- Gross/operating margins out of line with competitors or industry, an ambivalent signal.
  - Manager's ability or accounting manipulations?

COMPANY CULTURE AND FINANCIAL REPORTING QUALITY

- A company's culture can influence the quality of financial reports.
- Upper echelons theory: organizational outcomes are partially influenced by managerial characteristics.
  - Gender (male vs female CEOs/CFOs)
    - 2012 literature, in European countries, company should have at least 40% of female employees.
    - In California, at least 1 female director
  - ① Overconfident managers
    - Having unrealistic beliefs about any outcome aspect of the distribution of an uncertain outcomes such that the mean is overstated.
    - Self-attribution bias: take too much credit for themselve by attributing success to their own ability, whereas attributing failures to bad luck
  - ② Narcissistic managers
    - Self-focus and self-entitlement.

MANAGER'S CHARACTERISTICS

- Narcissistic personality: authoritative, exploitative
  - More likely to take actions that benefit themselves at the expense of others.



Signature size can actually capture narcistic characteristic

FIG. 1.— NPI-40 narcissism score and monetary allocation reported by quartile of signature size. This figure displays the relationship between signature size, narcissism, and misreporting. The standardized levels of narcissism (NPI-40 score) and monetary allocation reported are plotted by quartile of signature size.

TABLE 4
Discretionary Accruals and Accrual Quality

	CFO Narcissism		CEO Narcissism	
	AbsAccruals	*Accrual Quality*	*AbsAccruals*	*Accrual Quality*
SignatureSize	0.009***	0.004*	−0.001	0.001
	(0.003)	(0.002)	(0.002)	(0.002)

good proxy for narcistic characteristic

TABLE 5
Real Earnings Management Real action

	CFO Narcissism			CEO Narcissism		
	AbDisExp	*AbCFO*	*AbProdCost*	*AbDisExp*	*AbCFO*	*AbProdCost*
SignatureSize	0.051**	0.006	0.035*	−0.002	0.014**	0.023*
	(0.026)	(0.008)	(0.018)	(0.020)	(0.006)	(0.013)

abnormal spending

from cs operation

TABLE 8
Financial Restatements bad quality for financial report

	CFO Narcissism *Restatement*	CEO Narcissism *Restatement*
SignatureSize	0.455**	−0.281
	(0.211)	(0.263)

Ham, C., Lang, M., Seybert, N. and Wang, S., 2017. CFO narcissism and financial reporting quality. *Journal of Accounting Research*, *55*(5), pp.1089-1135.

EVALUATING THE QUALITY OF FINANCIAL REPORTS

- Understand company and industry.
- Learn about management.
- Identify important accounting areas.
- Compare:
  - Current year's report with prior year's report
  - Accounting policies with competitors' policies
  - Ratios with competitors' ratios
- Check for warning signs.
- Review segment results.
- Use quantitative predictors of misreporting.

CASH FLOW QUALITY

Corporate life cycle and industry profile affect cash flow and must be considered when analyzing the statement of cash flows.

spending a lot, and don't have many customers

- A startup company might be expected to have negative operating and investing cash flows, which would be funded from borrowing or from equity issuance (financing cash flows).
- In contrast, for established companies, high-quality cash flow would typically have most or all of the following characteristics:
  - Positive OCF(operating cash flow)
  - OCF derived from sustainable sources
  - OCF adequate to cover capital expenditures, dividends, and debt repayments
  - OCF with relatively low volatility (relative to industry participants).
- OCF is viewed as being less easily manipulated than operating or net income.
- Be aware of classification of cash flows. Managers may shift some items from investing or financing activities to operating activities to inflate OCF.

CASH FLOW QUALITY: EXAMPLE

EXHIBIT 25 Excerpt from Nautica Enterprises' Consolidated Statement of Cash Flow from Annual Report, filed May 27, 2000 (amounts in thousands)

	Year ended March 4, 2000
Cash flows from operating activities	
Net earnings	$46,163
Adjustments to reconcile net earnings to net cash provided by operating activities, net of assets and liabilities acquired	
Minority interest in net loss of consolidated subsidiary	—
Deferred income taxes	(1,035)
Depreciation and amortization	17,072
Provision for bad debts	1,424
Changes in operating assets and liabilities	
Accounts receivable	(6,562)
Inventories	(3,667)
Prepaid expenses and other current assets	(20)
Other assets	(2,686)
Accounts payable: trade	(548)
Accrued expenses and other current liabilities	9,086
Income taxes payable	3,458
Net cash provided by operating activities	62,685
Cash flows from investing activities	
Purchase of property, plant, and equipment	(33,289)
Acquisitions, net of cash acquired	—
Sale (purchase) of short-term investments	21,116
Payments to register trademark	(277)
Net cash used in investing activities	(12,450)

EXHIBIT 26 Excerpt from Nautica Enterprises' Consolidated Statements of Cash Flows from Annual Report, filed May 29, 2001 (amounts in thousands)

	Year Ended March 3, 2001	Year Ended March 4, 2000
Cash flows from operating activities		
Net earnings	46,103	46,163
Adjustments to reconcile net earnings to net cash provided by operating activities, net of assets and liabilities acquired		
Minority interest in net loss of consolidated subsidiary	—	—
Deferred income taxes	(2,478)	(1,035)
Depreciation and amortization	22,968	17,072
Provision for bad debts	1,451	1,424
Changes in operating assets and liabilities		
Short-term investments	28,445	21,116
Accounts receivable	(17,935)	(768)
Inventories	(24,142)	(3,667)
Prepaid expenses and other current assets	(2,024)	(20)
Other assets	(36)	(2,686)
Accounts payable: trade	14,833	(548)
Accrued expenses and other current liabilities	7,054	3,292
Income taxes payable	3,779	3,458
Net cash provided by operating activities	78,018	83,801
Cash flows from investing activities		
Purchase of property, plant, and equipment	(41,712)	(33,289)
Acquisitions, net of cash acquired	—	—
Purchase of short-term investments	—	—
Payments to register trademark	(199)	(277)
Net cash used in investing activities	(41,911)	(33,566)

- What amount does Nautica report as operating cash flow for the year ended March 4, 2000 in Exhibit 25? What amount does Nautica report as operating cash flow for the same year in Exhibit 26?

Reported in FY2000 : operating cash flow of FY 2000 = $ 62,685 thousand

" ——— FY 2001 : " ——— " = $ 83,801 " ———

- Exhibit 25 shows that the company had investing cash flows of $21,116 thousand from the sale of short-term investments for the year ended March 4, 2000. Where does this amount appear in Exhibit 26?

↳ Firm changed the classification of short-term investment item.

- As actually reported (Exhibit 26), how did the company's operating cash flow for fiscal year 2001 compare with that for 2000? If Nautica had not changed the classification of its short-term investing activities, how would the company's operating cash flows for fiscal year 2001 have compared with that for 2000?

CFO 2001 = $78,018 - $28,445 = $49,573 thousand

CFO 2000 = $62,685 thousand → dropped a lot!

BALANCE SHEET QUALITY

- High financial *reporting* quality requires:
  - Completeness, should record every transaction
  - unbiased measurement, and
  - clear presentation. fairly not too positive or negative
- High financial *results* quality (i.e., a strong balance sheet) requires:
  - optimal amount of leverage,
  - adequate liquidity, and
  - economically successful asset allocation.

UNBIASED MEASUREMENT

- Understatement of impairment charges overstates profits on the income statement and also results in overstatement of the assets on the balance sheet.
  - Inventory
  - Property, plant, and equipment
  - Goodwill
- Understatement of contra asset accounts overstates profits on the income statement and also results in overstatement of the assets on the balance sheet.
  - Allowance for bad debt

    should have consistent % gross AR
  - Deferred tax asset valuation allowance
- Assets and liabilities for which fair value is highly dependent on management estimates warrant scrutiny.

BALANCE SHEET QUALITY: EXAMPLE-GOODWILL

US-GAAP → should compare 3 years

EXHIBIT 27 Sealed Air Corporation and Subsidiaries Consolidated Statements of Operations ($ millions, except per share amounts)

Year ended December 31	2012	2011	2010
Net sales	$7,648.1	$5,550.9	$4,490.1
Cost of sales	5,103.8	3,950.6	3,237.3
Gross profit	2,544.3	1,600.3	1,252.8
Marketing, administrative, and development expenses	1,785.2	1,014.4	699.0
Amortization expense of intangible assets acquired	134.0	39.5	11.2
Impairment of goodwill and other intangible assets	1,892.3	—	—
Costs related to the acquisition and integration of Diversey	7.4	64.8	—
Restructuring and other charges	142.5	52.2	7.6
Operating (loss) profit	(1,417.1)	429.4	535.0
Interest expense	(384.7)	(216.6)	(161.6)
Loss on debt redemption	(36.9)	—	(38.5)
Impairment of equity method investment	(23.5)	—	—
Foreign currency exchange (losses) gains related to Venezuelan subsidiaries	(0.4)	(0.3)	5.5
Net gains on sale (other-than-temporary impairment) of available-for-sale securities	—	—	5.9
Other expense, net	(9.4)	(14.5)	(2.9)
(Loss) earnings from continuing operations before income tax provision	(1,872.0)	198.0	343.4
Income tax (benefit) provision	(261.9)	59.5	87.5
Net (loss) earnings from continuing operations	(1,610.1)	138.5	255.9
Net earnings from discontinued operations	20.9	10.6	—
Net gain on sale of discontinued operations	178.9	—	—
Net (loss) earnings available to common stockholders	$(1,410.3)	$149.1	$255.9

Sealed Air Corporation

In August 2012, a Wall Street Journal article listed six companies that were carrying more goodwill on their balance sheets than the companies' market values (Thurm 2012). At the top of the list was Sealed Air Corporation, a company operating in the packaging and containers industry. Exhibit 27 presents an excerpt from the company's income statement for the following year, and Exhibit 28 presents an excerpt from the company's balance sheet.

EXHIBIT 28 Excerpt from Sealed Air Corporation and Subsidiaries Consolidated Balance Sheets ($ millions, except share data)

Year Ended December 31	2012	2011
ASSETS		
Current assets		
Cash and cash equivalents	$679.6	$703.6
Receivables, net of allowance for doubtful accounts of $25.9 in 2012 and $16.2 in 2011	1,326.0	1,314.2
Inventories	736.4	777.5
Deferred tax assets	393.0	156.2
Assets held for sale	—	279.0
Prepaid expenses and other current assets	87.4	119.7
Total current assets	$3,222.4	$3,350.2
Property and equipment, net	$1,212.8	$1,269.2
Goodwill	3,191.4	4,209.6
Intangible assets, net	1,139.7	2,035.7
Non-current deferred tax assets	255.8	112.3
Other assets, net	415.1	455.0
Total assets	$9,437.2	$11,432.0

- Sealed Air Corporation's financial statements indicate that the number of common shares issued and outstanding in 2011 was 192,062,185. The price per share of Sealed Air Corporation's common stock was around $18 per share in December 2011 and around $14 in August 2012; the Wall Street Journal article (Thurm 2012) was written in 2012. What was the company's market value?

market cap

2011 = 192,062,185 × $18 = $3.5 billion

2012 = 192,062,185 × $14 = $2.68 billion

goodwill is higher than company mkt value

- How did the amount of goodwill as of December 31, 2011 compare with the company's market value?

Goodwill @ 2011 : $4.2 billion

Goodwill @ 2012 : $3.2 billion

• company may has synergy, so they buy with price higher than mkt cap

not the case!

- Why did the Wall Street Journal article state that goodwill in excess of the company's market value is "a potential clue to future write-offs"?

will probably write down the value of goodwill

SOURCES OF INFORMATION ABOUT RISK

- Financial statements, including notes:
  - Ratios derived from financial statements
  - Prediction models (e.g., bankruptcy, misreporting)
  - Notes on contingencies and litigation e.g. lawsuit in 10-K report of AMAZON
  - Notes on actuarial risks associated with pensions and post-employment benefits
  - Notes on credit risk, liquidity risk, and market risks that arise from the company's financial instruments
- Audit opinion → new section " Key Audit Matters"
- Discretionary change in auditor reasons ① mandatory (regular rotation) 7 yrs in Thailand ② auditor know something so she/he resigns
- Management commentary MD&A section
- Disclosures pertaining to specific events (e.g., capital raising, non-timely filing of financial reports, management changes, mergers and acquisitions)
- Financial press

SUMMARY

- Financial reporting quality can be thought of as spanning a continuum.
- *Reporting quality* pertains to the information disclosed whereas *results quality* (commonly referred to as earnings quality) pertains to the earnings and cash generated by the company's actual economic activities.
- Motivations to issue lower-quality financial reports include masking poor performance, boosting the stock price, increasing personal compensation, and/or avoiding violation of debt covenants.
- Examples of accounting choices that affect earnings and balance sheets include revenue recognition, inventory cost flow assumptions, estimates of realizability of assets (such as accounts receivable and deferred tax assets), depreciation method, estimated salvage value, and useful life of depreciable assets.
- Warning signals of potential accounting manipulation should be evaluated cohesively, not on an isolated basis.

Appendix

EARNINGS QUALITY IN ACADEMIC LITERATURE

1) Properties of earnings
   - Earnings persistence
   - Accruals
   - Earnings smoothness
   - Asymmetric timeliness and timely loss recognition
   - Target beating
2) Investor responsiveness to earnings
   - Earnings response coefficient (ERC) or R^2 from the earnings-returns model
3) External indicators of earnings misstatements
   - AAER
   - Restatements, internal control procedure deficiencies

Dechow, P., Ge, W. and Schrand, C., 2010. Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of accounting and economics*, *50*(2-3), pp.344-401.

PROPERTIES OF EARNINGS: PERSISTENCE

- Theory: firms with more persistent earnings have a more "sustainable" earnings/cash flow stream, making it more useful input for equity valuation.
  come from sustainable sources
  - Recurring earnings
- **Earnings persistence:**

this year can predict earning next year

$$Earnings_{t+1} = \alpha + \beta * Earnings_t + \varepsilon_t$$

β measures persistence

- **Relative earnings of cashflows and accruals:**

which components actually can predict

Sloan(1996) decomposes total earnings into the cash flow component and total accruals:

$$Earnings_{t+1} = \alpha + \beta_1 * Cashflow_t + \beta_2 * Accruals_t + \varepsilon_t$$

Finding: $\beta_2 < \beta_1$ = the cash flow component of earnings is more persistent than accrual component. (Doesn't mean that accruals are not useful)

from estimation

- Accrual component arises from accounting rules that reflect revenue in the period earned and expense in the period incurred-not at the time of cash movement.

PROPERTIES OF EARNINGS: MAGNITUDE ACCRUALS

- Theory: Extreme accruals are low quality because they represent a less persistent component of earnings.
- Definition of accruals has changed over time.
  - $Accruals = Earnings_t - Cashflow_t$
  - $Accruals = (\Delta \text{non cash working capital})$
  - $Accruals = (\Delta \text{net operat}ing\ assets)$
  - Specific accrual components

  - Accruals that arise from normal transactions in the period is known as *"non-discretionary accruals"*
  - Accruals that result from transactions or accounting choices outside normal transaction is called *"discretionary accruals" or "abnormal accruals"*
    ↳ bad financial reporting quality
    - Possibly distort reported earnings
    - Outlier discretionary accruals is an indicator of possible manipulation and thus low quality earnings.

PROPERTIES OF EARNINGS: RESIDUALS FROM ACCRUAL MODELS

- Theory: residuals from accrual models represent management discretion or estimation errors, both of which reduce decision usefulness.
  - Apply accrual models to estimate normal levels of accruals. Then, the residuals from the models are used to measure abnormal accruals.

- A few popular accrual models:

- Jones (1991): the accrual process (working capital accruals and depreciation) as a function of sales growth and PPE.

$$Acc_t = \alpha + \beta_1 \Delta Rev_t + \beta_2 PPE + \varepsilon_t$$

- Performance matched (Kothari et al., 2005): match firm-year observation with another from the same industry and year with the closest ROA. Discretionary accruals are from the Jones model or modified Jones model.

$$\text{Performance} - \text{Matched Residual} = DisAcc_t - Matched\ firm's\ DisAcc_t$$

- So many accrual models in the literature. If interested, please read “Dechow, P., Ge, W. and Schrand, C., 2010”.

PROPERTIES OF EARNINGS: EARNINGS SMOOTHNESS

- Not quite popular
- One argues smoothing transitory cash flows can improve earnings persistence and earnings informativeness. The other argues that smoothing permanent changes in cash flows may lead to a less timely and less informative earnings number.
  - Differentiating informative choices from opportunistic choices is difficult to do.

Empirical proxy:

- σ(Earnings)/ σ(Cash flows): variance
- Corr($\Delta ACC, \Delta CFO$): correlation
  - A lower ratio represents more smoothing of the earnings stream relative to cash flows.
  - Abnormal smoothness are assumed to be a proxy for the degree of earnings management.

PROPERTIES OF EARNINGS: TIMELY LOSS RECOGNITION (TLR)

- Conservatism leads to recognizing bad news more quickly than good news (Asymmetric timeliness of earnings).
  - For example, unrealized loss are typically recognized earlier than unrealized gains.
  - Reported earnings respond more quickly to bad news than good news.
  - Earnings is more timely or concurrently sensitive in reflecting publicly available bad news than good news.
- Theory: There is a demand for TLR to overcome manager's natural optimism. TLR represents high quality earnings.

- $Earnings_{t+1} = \alpha_0 + \alpha_1 D_t + \beta_0 Ret_t + \boldsymbol{\beta_1} D_t Ret_t + \varepsilon_t$

D_t = 1 if Ret_t<0 ;
Ret= return (measures news, good news= positive return, bad news = negative return)

- A higher β_1 implies more timely recognition of the incurred loss in earnings.

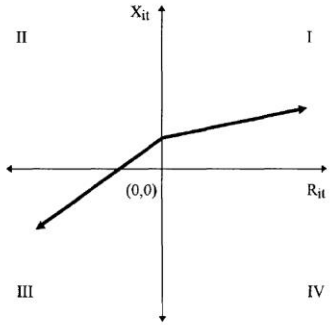


Fig. 2. Hypothesized association between earnings and returns under conservatism.

X_{it} and R_{it} are earnings and stock returns, respectively, for firm i in year t. Quadrant I contains observations with positive returns and positive earnings. Quadrant II contains observations with negative returns and positive earnings. Quadrant III contains observations with negative returns and negative earnings. Quadrant IV contains observations with positive returns and negative earnings.

Basu, S., 1997. The conservatism principle and the asymmetric timeliness of earnings1. *Journal of accounting and economics*, *24*(1), pp.3-37.

PROPERTIES OF EARNINGS: BENCHMARKS

- Theory: Unusual clustering in earnings distributions indicates earnings management around targets. Observations at or slightly above targets have low quality earnings.
- Kinks in earnings distribution
- Changes in earnings distribution
- Kinks in forecast error distribution
- String of positive earnings increases
- Popular target beating benchmark:

analysts' forecasts

no manipulation → expect to see smooth normal distribution

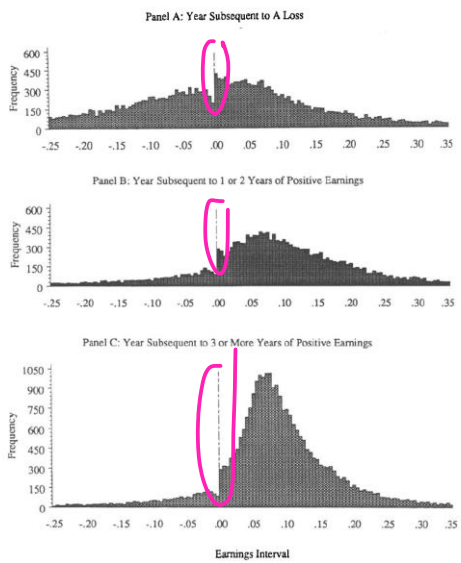


Fig. 4. Three empirical distributions of earnings scaled by market value categorized according to the pattern of preceding earnings for the firm. Panel A: the distribution for the years immediately following a loss; Panel B: the distribution for the years following exactly one or two years of positive earnings; and Panel C: the distribution for the years following three or more years of positive earnings. (See Fig. 3 for detailed definitions of variables.)

cross benchmark a little bit

spike across the benchmark

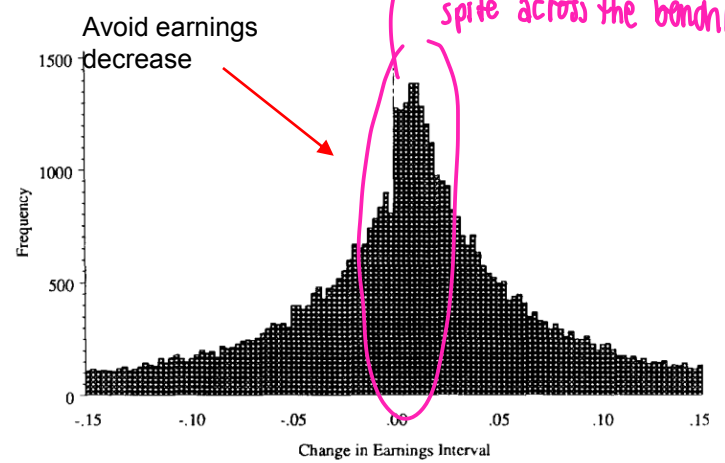


Fig. 1. Empirical distribution of changes in annual net income (Compustat item #172) scaled by market value (Compustat item #25 × Compustat item #199) as of the beginning of the first year, $(Earnings_t - Earnings_{t-1})/MV_{t-2}$. The distribution interval widths are 0.0025 and the location of zero on the horizontal axis is marked by the dashed line. For example, the first interval to the right of zero contains all scaled changes in earnings in the interval [0.0000, 0.0025), the second interval contains [0.0025, 0.0050), and so on. The vertical axis labeled frequency represents the number of observations in each earnings change interval.

Burgstahler, D. and Dichev, I., 1997. Earnings management to avoid earnings decreases and losses. *Journal of accounting and economics*, *24*(1), pp.99-126.

EARNINGS RESPONSE COEFFICIENT (ERC)

- Theory: Investors respond to information that has value implications. A higher correlation with value implies that earnings better reflect fundamental performance.
  - Focus on equity valuation decision

Investors use info of surprise to sell / buy stock and change to return → ⊕ β → Investors actually use financial info

actual earning - forecasted earning

return

$$Ret_t = \alpha + \boldsymbol{\beta}(Earnings\ Surprise_t) + \varepsilon_t$$

- Earnings surprise (unexpected earnings) = actual earnings for *t* minus the forecast of period *t* earnings in *t-1*.
- More informative components of earnings will have a higher β.
- More value relevant earnings will have a higher R^2

EXTERNAL INDICATORS OF EARNINGS MANAGEMENTS

- Theory: firms had errors (accounting and auditing enforcement releases(AAERs) and restatement firms) or are likely to have had errors (internal control weaknesses) in their financial reporting systems, which implies low quality of earnings.

Empirical proxy:

- AAERs identified by SEC
- Restatements
- SOX reports of internal control deficiencies.

internal control report

1. The information provided by a low-quality financial report will most likely: (1 คะแนน)

- ✓ impede the assessment of earnings quality.
- indicate earnings do not yield adequate return on investment.
- indicate earnings are not sustainable.
- decrease company value.

2. Earnings that result from non-recurring activities most likely indicate: (1 คะแนน)

- lower-quality financial reporting.
- ✓ lower-quality earnings.
- aggressive accounting choices.
- biased accounting choices.

3. Financial reports of the lowest level of quality reflect: (1 คะแนน)

- accounting that is non-compliant with GAAP.
- biased accounting choices.
- accounting that is compliant with GAAP but earnings are managed.
- ✓ fictitious events.

4. When earnings are increased by deferring research and development (R&D) investments until the next reporting period, this choice is considered: (1 คะแนน)

- non-compliant accounting.
- ✓ earnings management as a result of a real action.
- aggressive accounting choices.
- earnings management as a result of an accounting choice.

5. Two most important earnings benchmarks are: (1 คะแนน) pg.14

- same quarter last year net income, same quarter last year cash flow from operation.
- same quarter last year net income, analyst consensus cash flow from operation for current year.
- ✓ same quarter last year EPS, analyst consensus EPS for current year.
- same quarter last year EPS, analyst consensus EPS for last year.

6. Which of the following statements most likely describes a situation that would motivate a manager to issue low-quality financial reports? (1 คะแนน)

- ✓ The manager's compensation is tied to stock price performance.
- The company has ineffective internal controls that are later resolved.
- The manager has increased the market share of products significantly.
- The manager has brought the company's profitability to a level higher than competitors.

7. Which of the following best describes an opportunity for management to issue low-quality financial reports? (1 คะแนน)

- Rationalization of dishonest actions.
- Pressure to achieve some performance level
- Ineffective board of directors
- Corporate concerns about financing in the future

8. A company wishing to increase earnings in the reporting period may choose to: (1 คะแนน)

- decrease the useful life of depreciable assets.
- lower estimates of uncollectible accounts receivables.
- classify non-recurring expenses to recurring expenses.
- classify a purchase as an expense rather than a capital expenditure.

9. Which technique most likely increases the cash flow provided by operations? (1 คะแนน)

- Stretching the accounts payable credit period
- Applying all non-cash discount amortization against interest capitalized
- Shifting classification of interest paid from financing to operating cash flows
- Extending customer credit terms.

10. Which of the following statements is incorrect about accruals? (1 คะแนน)

- abnormal accruals are the component that indicates potential manipulation of earnings by a manager.
- extreme accruals are considered to be low quality.
- abnormal accruals are the component that possibly overstates reported earnings.
- discretionary accruals arise from normal transactions in the period.

11. Which of the following statements is correct about cash flow? (1 คะแนน)

- cash flow is likely affected by corporate life cycle and industry profile.
- a startup firm tends to have negative operating and investing cash flows.
- a mature firm tends to have positive cash flow from operation.
- All of the above