2019 SM1 FAT Comprehensive Notes (90+ Marks)

Topic List (page 1)

Lecture 8 Earnings Management

What is Earnings Management?

No generally agreed definition

Schipper (1989), "purposeful intervention in the external financial reporting process, with the intent of obtaining some gain (as opposed to merely facilitating the neutral operation of the process".

Healy and Wahlen (1999), "the use of judgement in financial reporting and in structuring transactions in order to alter financial reports either to mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers".

Focus of This Lecture

Choices within GAAP legally available to managers, except fraudulent reporting (earnings manipulation, illegal).

Two ways of EM

1. Accounting choices (paper effect) via discretionary accruals or accounting policy choices;
2. "Real" cash flow choices

Methods of EM

1. "REAL DECISIONS" – managers undertake operating, financing and investment decisions primarily to manage earnings as opposed to increasing firm value. It is very difficult to observe management "real decision" as it is prior to the recording of financial statement. Thus, it is hard to attribute this behavior to earnings management motivation.
   - Operating decisions: Delay or Accelerate R&D expenditure, maintenance expenditure and sales. This would boost earnings in short term. However, it may result in serious expense at long term performance because of forgone opportunity to growth.
     For instance, boosting sales through excessive sales discounts and cutting R&D and maintenance cost to reduce expense.
   - Financing decisions: early extinguishment of debt. Managers may elect to pre-paying debt to save interest expense and maintain good D/E ratio. Thus, managers may get bonus compensation as company looks good and liquid. However, the downside is that the pre-payment of debt may forgo opportunity for business growth as the firm may not have enough cash to make investment. Business can use the loan to grow!
   - Investment decisions: sale of securities or fixed assets to affect gains and losses

2. "ACCOUNTING DECISIONS" – these accounting decisions may not have direct, first-order cash flow effects, but they may have indirect, second-order effect on cash flow. Typically, managers may undertake earnings management through managerial discretion in:
   - Choice of accounting policies, i.e., change of depreciation method, asset useful life, estimated residual value; capitalize versus expense; changes in measurement choices. These changes in accounting policies are required to be disclosed to inform users of the financial statement. This method of EM is more "transparent" than the method of using accruals.

   - Timing of accruals, i.e., adjust estimate of doubtful debts expense; deferral of costs previously recognized as expenses; write-offs or write-downs of non-performing assets.

   - Recognition versus disclosure, i.e., footnote disclosure versus recognition. Disclosure and recognition require different level of precision and detail. As the market is not fully efficient, the difference in the reporting method will affect investors decision making.

   - Classification, i.e., operating, abnormal or extraordinary item; hybrid security as debt or equity. Classification affect the reported earnings figure. Companies try to increase income to make it look good by having wrong classification. Managers may manipulate accruals though incorrect classification to increase the operating income. This can be done by shifting normal operating costs "below the line" that is firms hide operating expenses under "restructuring charges"[1] (persistent operating expense into one off cost, less implication for the future). Alternatively, managers may shift non-operating income to the operating income section (make one-time business earnings appear to be persistent core business earnings).
     - For instance, IBM managed to show a $4.1 billion gain from the sale of a business as a reduction in its selling, general and administrative expenses even though its cost of goods sold increased at a greater rate than revenue.
     - Investors and analysts focus on core earnings but not extraordinary[2] and non-recurring items which implies that managers are not penalized for non-core charges including write downs, provisions for restructuring.
     - Current non-core charges increase core earnings in future years through lower amortization and absorption of future costs. Thus, managers tempted to "overdose" on non-core charges to put earnings "in the bank".

[1] Restructuring charge is the cost which is incurred by the company when they recognize the operations of the business to improve the overall efficiency and longer-term profit.

[2] An event or transaction is deemed extraordinary if it is both unusual and infrequent.

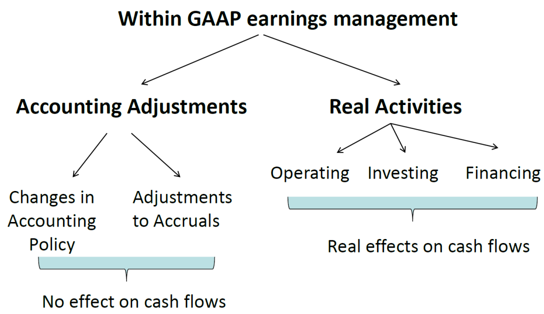
Note on Methods of EM

Research shows firms more likely to engage in real activities earnings management (postponing R&D or advertising expenditures, accelerating sales etc.) rather than accrual accounting earnings management/accounting adjustments (e.g. Changing depreciation method, extend estimated useful life), because it is hard to detect and easier to justify i.e., relate to new business strategy and plan. However, real earnings management are more detrimental to firm value relative to accrual base management since it have CF effect (accrual accounting management has no impact on future performance of the firm, hence no impact upon the firm's valuation).

On the opposite side, change in accrual accounting is hard to justify and is easily detected. Moreover, it is difficult to change accounting policy period to period (need to provide justification, otherwise outsiders will be suspicious for earnings manipulation) and it requires extensive disclosure in financial statement.

The Distinction between Fraud and Earnings Management

	Accounting Choices	"Real" Cash Flow Choices
	Within GAAP	
'Conservative' Accounting	Overly aggressive recognition of provisions or reserves Overvaluation of acquired in-process R&D in purchase acquisitions Overstatement of restructuring charges and asset write-offs	Delaying sales Accelerating R&D or advertising expenditures
"Neutral" Earnings	Earnings that result from a neutral operation of the process	
"Aggressive" Accounting	Understatement of the provision for bad debts Drawing down provisions or reserves in an overly aggressive manner	Postponing R&D or advertising expenditures Accelerating sales
	Violates GAAP	
'Fraudulent' Accounting	Recording sales before they are "realizable" Recording fictitious sales Backdating sales invoices Overstating inventory by recording fictitious inventory	



Motivations for Earnings Management

Contractual Incentives:

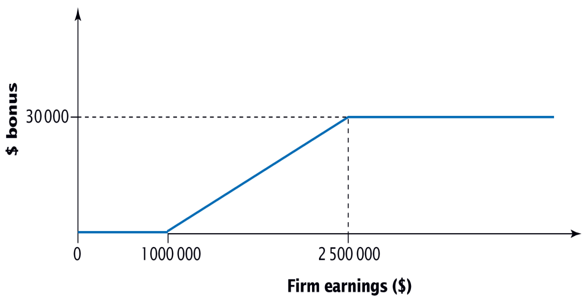
1. Management Compensation

Bonus plan hypothesis states that managers are incentivized by the way they are paid, to maximize cash bonus. With a typical bonus scheme, reported net income will have a lower bound called bogey and upper bound called cap. A manager's bonus will increase as reported net income increases, unless there is a cap at which point the bonus will remain the same as net income continues to increase beyond the cap. A manager will not receive any bonus when income is below the bogey.

Evidence: Healey (1985) predicts that when earnings is between the bogey and cap, managers are motivated to adopt accounting policies to increase reported earnings. When earning is below the bogey or above the cap would motivate mangers to do big bath accounting whereby, they will try to reduce or minimize net income. By doing this, managers will then increase the probability of receiving a bonus the following year since current write-offs will reduce future amortization charges. Likewise, mangers would take a bath (to a lesser extent) to decrease earnings since a bonus would be permanently lost on reported net income greater than the cap.

Healy (1985) found that Firm managers whose net incomes are below the bogey and above the cap will tend to adopt income decreasing accruals and only managers with net income between the two will tend to adopt income-increasing accruals. It also concludes that in 9 of the 12 years, the portfolio of firms with bonus plans changes had more accounting policy changes. This provides significant evidence that managers also use such changes as an earnings management vehicle.

Managers use EM to control for risk in compensation contracts. The motivation could either be good (i.e. for efficient contracting objective) or bad (i.e. for opportunistic behaviour).



2. Debt Covenants

Managers manage earnings to avoid debt covenant violation (efficient contracting or opportunistic behavior purpose).

Evidence: Dichev and Skinner (2002) covenant slack = actual current ratio – required current ratio in lending agreement. Negative covenant slack indicates covenant violation; while, positive covenant slack means you still have some cushion for violation. There is abnormally high proportion of firms with zero or slightly positive covenant slack. the reason for the distribution of covenant slack is discontinued but not a bell shape is that many firms have earnings management to keep them not violating contract.

3. Change of CEO

Incumbent managers use accounting discretion to manage earnings in order to give a favorable impression of their performance. For instance, new CEO may take a big bath i.e., large write-downs, write-offs and large negative discretionary accruals. The previous managers are blamed for the resulted lower earnings. In the following year, the new manager takes the credit of the increased earnings due to decreased future amortization costs and increased ROE due to lowered assets and increased earnings.

Regulatory or Political Incentives:

Manager may manage earning to avoid industry regulations and exposure to political movement. For instance, the oil and gas companies around Gulf War(s) may manage earnings to attenuate the effect of war. Moreover, the case of Microsoft and monopoly lawsuit. Microsoft does cookie jar accounting to manage earnings downwards to avoid reporting high profitability. If a company is so profitable, it may attract higher tax and even the introduction of new tax scheme as well as increase spotlight for suspecting monopoly which is subject to antitrust law. Similarly, the behaviour of Australian mining companies around the introduction of a gold tax.

Capital market:

1. Surrounding Capital Market Transactions

Managers may manage earnings upwards to boost share price in times of Seasoned Equity Offerings or Initial Public Offerings. On the other hand, managers may manage earnings downwards to purchase the shares at lower price in times of management buyouts or repurchases to take ownership of the firm. Managers involve in insider trading managing earnings downward before they purchase shares or promote share value and manipulate earnings upward before sale of shares by managers.

Evidence: in the event of IPO, there is no established market price. Thus, accounting reports plays an important role in providing source of information to value shares. In the year of IPO, earnings are higher, and accruals are more positive than subsequent years which are subsequently. Reserves and allowances are less in IPO year and reversed in later years. Firms are generally overvalued during IPO and share is overpriced.

	Year of	Year after IPO					
Diagnostic (%)	IPO	1	2	3	4	5	6
Net income/sales	4.6	2.8	2.1	1.6	1.3	1.3	1.8
Abnormal accruals/book value	5.5	1.6	-0.4	-0.8	-2.0	-1.4	-2.7
Allowance for uncollectibles/gross accounts receivable	2.91	3.32	3.46	3.62	3.81	3.77	3.85

Source: S. Teoh, T. Wong and G. Rao, "Are Accruals During An Initial Public Offering Opportunistic?" Review of Accounting Studies, 1998.

2. Surrounding Earnings Announcements

Managers manage earnings to meet (or exceed) analysts' forecasts. This is an example of benchmark beating. Evidence from research shows that firms meeting the analysts' forecast is of abnormally higher frequency than missing it, which is evident from the discontinuity on distribution graph. This is because failure of meeting the analyst' forecasts is highly likely to result in strong negative share price reaction. Thus, managers do EM to ensure smooth earnings (good EM to signal true prospects of the firm), or to smooth growing earnings across time to reduce earnings volatility.

Note: Internet companies often had no earnings. Thus, they are typically valued by their revenue streams by the market. Therefore, managers have incentive to manage revenue instead of earnings. SEC in US and ASIC watches out for this "aggressive" revenue recognition policies.

Other Motivations for Earnings Management

- ✧ Influence shareholder perceptions of management performance in board control contests (proxy fight or takeover, management try to prove their performance to stay in control, incentive to manipulates earnings upwards)

- ✧ Union contract negotiations (high profitability, employee demanding better pay, firm will have incentive to manipulate earnings downwards, to reduce earnings, to even make it appears as a loss)

- ✧ Implicit contracts (customers, suppliers, employees): Customer buy products for a company that is going concern (for warranty, after sales service etc., hence they usually buy from firm with high profitability, firm manipulates earnings to get their implicit contract). Supplier offer credit facilities, firm need to show liquidity, may have incentive to engage in EM to show liquidity and profitability. Employees want to work for firm that stay flow and have stable employment prospective, firm engage in EM.

Patterns of Earnings Management

- ✧ **Big bath accounting (usually happens when there's a change in CEO):** take more write offs, more maintenance and restructuring charge, take more provision and allowances, deteriorate the firm's performance and blame everything to old CEO, next year accruals will reverse and amortisation will decrease, better chance to have good performance, 'earnings turnaround'. Manipulating Income statement to make poor results look even worse. Often implemented in a bad year to enhance artificially next year's earnings. Moreover, following year ROE may increase due to higher earnings and lower net asset.

- ✧ **Income minimization:** less extreme than earnings bath. Various reasons to have understate earnings as discussed above.

- ✧ **Income maximization:** accounting choices to maximize current period earnings to make financial statement looks good (particularly if bonus ties to performance)

- ✧ **Income smoothing (Cookie jar accounting):** the use of accounting techniques to level out net income fluctuations from one period to the next. That is in the years that the firm has good performance, put something in reserves, allowance or provision, for bad years in the future. Subsequently, in bad years, firms can use this reserve to reduce expense in future period. Firms shift earnings from current period to future period to smooth out earnings which in turn makes earnings less volatile. There are several positive consequences include earnings increase steadily, reduce volatility of earnings to avoid negative consequences of violating debt contract and reduce the risk of the business so that the firm can maintain a low discount factors and steady valuation.

		DR	CR		DR	CR
4. Exaggerating current expenses/losses to create cookie jar		loss	liability/Asset		No journal entry	
	later:	liability	cash	later:	loss	cash

Evidence of Earnings Management

It is difficult to prove as hard to determine how much of the total accruals is normal or non-discretionary and how much is abnormal due to EM (discretionary). One cannot conclude definitively that the "abnormal" accruals reflect EM. It is also difficult to separately identify 'real activities manipulation' from real strategic decisions.

Two main approaches

1. Estimate abnormal or discretionary accruals

2. Examine distribute of earnings numbers around benchmarks

Total Accruals = Net Profit – Cash Flows from Operations

- Large abnormal/discretionary accruals could be evidence of EM

- Positive associations found between EM incentives and levels of abnormal discretionary accruals

Iron Law of earnings management

Net income = Cash flow from operations (relevance, and more persistent earnings) + Total Accruals (not persistent, if you have positive accruals in year 1, likely to have reverse accruals (-ve accruals) in the subsequent years) .

Typical accruals: depreciation and amortisation, increase/decrease in receivables/payables, inventories, prepayments/unearned revenue, provisions and write-offs.

Iron law of earnings management: accruals reverse. Hence, In long run, net income = cash flow, $\sum$accruals =0

Discretionary (due to manipulation of accounting policies) vs. Non-discretionary (due to growth in sales/earnings)

Net Income = CFO +/- Total Accruals

Discretionary accruals/Unexpected accruals/Abnormal accruals

Proxy for Earnings management

Non-Discretionary accruals/Expected accruals/Normal accruals

Considered as a function of business operations. E.g. a firm that mainly sells on credit is expected to have high accruals.

- Discretionary accrual is a non-mandatory expense or asset that is recorded within the accounting system that has yet to be realized i.e. management bonus, party expense.

- Most recent approach in accounting research to the distribution of earnings numbers. Earnings should be normally distributed. However, it appears that abnormally high number of firms manage earnings to beat the analyst's forecasts. This is interpreted as indication of EM.

Constraints on EM

✧ High quality audit: but note auditors allow EM (especially if choices are made within GAAP)

✧ Restrictions on choices by contracts in place (i.e. cannot make choice on depreciation method or change between methods)

✧ Increased regulations/reduced flexibility in accounting reporting requirements e.g. Changes to accounting for identifiable intangible assets

✧ Strong effective corporate governance arrangements through ethics, oversight and disclosure

✧ Duration and magnitude of effect

  ✧ Tradeoff between Short-term gain vs. Long term reputation for credible reporting

  ✧ Reversing effect of accruals: income = cash over the life of the firm, accruals reverse. Due to this self-correcting mechanism, EM cannot be sustained. Thus, it does not make sense for the firm to continually engage in EM.

✧ Regulatory scrutiny and interventions

Two sides of Earnings Management

Good side (efficiency argument)

✧ Contracting-based argument

To increase contracting efficiency. As contracts are incomplete, there should be some degree for earnings management to take place. Firm is a nexus of contracts. It is unknown in advance that how GAAP may or may not change and the consequences. Thus, EM allows for some degree of flexibility in the reporting on contracts to take account of these contingencies which in turn reduces contracting costs.

For instance, bonus contracts based on earnings. The introduction of new accounting standards may lower earnings and or increase earnings volatility. Thus, it may adversely affect manger’s effort. Manager may elect to manage earnings in order to secure the deserved bonus. Moreover, the debt covenant contracts. The changes in GAAP rules may increase the probability of violating the debt covenant terms, known as technical violation. The consequence will be server and costly. Thus, managers may use EM to ensure that the debt covenant is not affected by the introduction of the new accounting standards.

✧ Investor-based argument

Signaling: conveying inside information to investors. Blocked communication may inhibit direct disclosure of earnings expectations, discretionary accrual management as a way to credibly reveal management’s inside information about earnings expectations. For instance, when a firm is applying for a patent, if discloses, competitors may keep up with the opportunity to release products first and you lose market shares. Can’t disclose this, but then market won’t react to this positive information and shares will be undervalued. Use EM to correct this by managing accruals and real EM.

To credibly communicate information about persistent earnings to investors and thus minimize adverse selection. It has been argued that EM is a good thing to allow managers to “smoothly” reveal the firm’s true future prospects – the revelation of the firm’s underlying persistent earnings. That is, managers can use discretionary accrual management as a way to credibly reveal management’s inside information about the amount of earnings that the manager expects to persist.

Bad side (opportunistic argument)

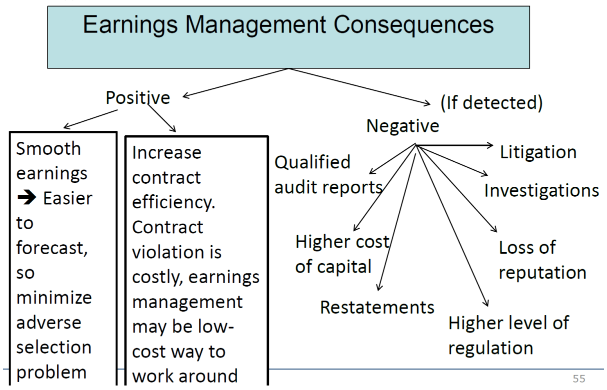
✧ First-order effect of miss-appropriated transfer of wealth

✧ Contracting perspective: EM to maximize manager’s bonus (Healy 1985) or EM to avoid debt covenant violation which violates GAAP (Dechow, Sloan and Sweeny, 1996). Maximize manager’s or firm’s payoff at the cost of shareholders or creditors. For instance, carve R&D expense to get short term gain while forgoing long term profitability and growth.

✧ Financial reporting perspective (mis-classification of persistent vs non-persistent items, sometimes firms shift non persistent earnings to persistence in reporting) : Hanna (1999) Investors and analysts look to core earnings, ignoring extraordinary and non-recurring items, implies manager not penalized for non-core charges, such as write-downs, provisions for restructuring. But current non-core charges increase core earnings in future years, through lower amortization and absorption of future costs. As a result, managers tempted to overdose on non-core charges, and use EM to put earnings ‘in the bank’ reserve for bad time in the future to increase income (cookie jar soothing accounting).

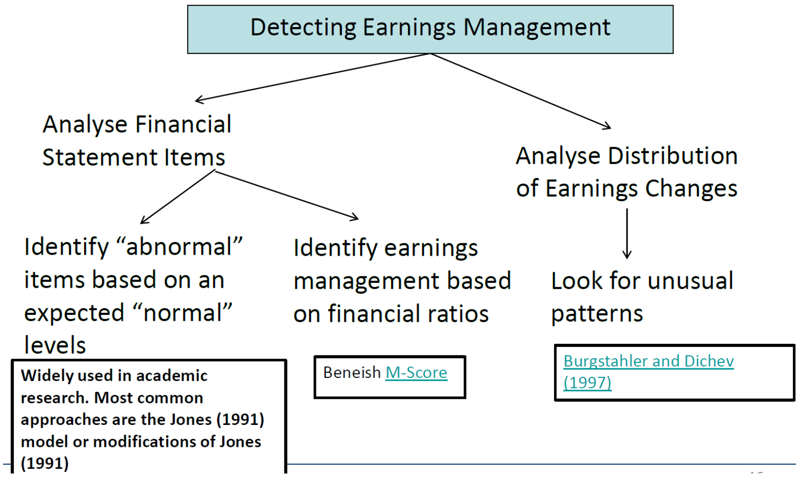
✧ Second-order effect of decrease in wealth of both the firm and also the capital market as a whole

Negative consequences are possible if EM employed is (1) detected; and (2) perceived as overly opportunistic – qualified audit report, ASIC investigations, FR restatement, negative media coverage, increased cost of capital and reduced SP, overall increase in regulation.



Appendix (for your interest in accounting)

Models to estimate accruals to detect earnings management



Flash points: Accounting area where manipulation is more likely

Banking	Credit losses: quality of loan loss provisions (to reflect risk of default)
Computer hardware	Technological change: quality of receivables and inventory
Computer software	Marketability of products: quality of capitalised R&D
Retailing	Credit losses: quality of net accounts receivable Inventory obsolescence: quality of carrying values of inventory Rebate programs: quantity of sales, rebate from sales (may report rebate as income rather than discount to artificially inflate revenue), and estimated liabilities
Manufacturing	Warranties: quality of warranty liabilities, warranty provision
Automobile	Overcapacity: quality of depreciation allowances
Telecommunication	Technological change: quality of depreciation allowances
Drugs	R&D: quality of R&D expenditures Product liability: quality of estimated liabilities

TABLE 18.1 How Specific Balance Sheet Items Are Managed to Increase Income

Balance Sheet Item	Earnings Management	Effect on Income	Flash Points
Assets			
Gross receivables	Book revenue in advance of its being earned	Higher revenues	Contracts with multiple deliverables; long-term contracting; sales with related parties
Net receivables	Decrease allowances for bad debts and sales returns	Higher revenues or lower selling expenses	Receivables with low credit quality; banks' loan loss reserves
Lease receivables	Increase estimated residual values on lease termination	Higher lease revenues	Aircraft leases; computer leases; equipment leases
Inventories	Book noninventory costs to inventory; fail to write down obsolete inventories	Lower cost of goods sold or SG&A expense	Technological change causing inventory obsolescence; falling inventory prices
Prepaid expenses	Overestimate amount of expenses prepaid	Lower SG&A expense	Considerable expenses paid in advance
Property, plant, and equipment	Book repairs and maintenance to PPE; increase estimated lives or estimated salvage values; excessive impairment charges	Lower depreciation charges that appear all through the income statement, from cost of goods sold down	Capital-intensive manufacturing
Intangible assets	Charge inappropriate expenses to intangible assets; lower amortization rates	Lower amortization expense in SG&A	Knowledge-based companies; capitalized software costs
Deferred charges	Classify too much current expense as deferred expense	Lower SG&A expense	Valuation allowances on deferred tax assets; capitalized costs of acquiring customers
Liabilities			
Deferred revenue	Reduce deferred revenues	Higher revenues	Firms that defer revenues with multiple deliverables
Warranty liabilities	Reduce warranty reserve	Lower selling expenses	Firms with guaranties and warranties on their products
Accrued expenses	Reduce amount of expenses accrued	Lower expenses—applying to all expense lines	All firms
Pension liabilities	Reduce pension liabilities by changing actual assumptions and discount rate	Lower pension expense	Defined benefit pension plans
Unpaid claim reserves	Reduce the reserve	Lower claims expense	Insurance companies

Breeding ground for Accounting Manipulation (where manipulation is more likely to happen and deserve more attention)

- Weak governance structure: inside management dominate the board; a weak audit committee
- Regulatory ratio requirements: contractual incentive of EM, (like capital ratios for banks and insurance companies) are likely to be violated, if there're requirements, may engage in EM to maintain the ratios
- Transaction with related parties (tunneling activities): not at arm's length transaction (if manager or CEO of firm A is a big stakeholder at firm B, may involve in related party transaction and engage in EM to transfer profitability from A to B, detrimental to A)
- Special events: union negotiations (incentive to manipulate EM downwards)
- Takeover target/in proxy fights: the firm is "in pay": inflate earnings to increase share price
- Unexpected or (too) Frequent management changes: big bath accounting

Identify and assess potential red flags (indicators of accounting distortions)

- Unexplained changes in accounting policies when performance is poor
- Unexplained transactions that boost profits
- Abnormal increases in receivables relative to sales
- Abnormal increases in inventory relative to sales — final completed inventory may be bad news: asset turnover & stock obsolete;
- Increasing gap between accounting-based profit and cash flows (high accruals)— capitalising R&D instead of expensing
- Increasing gap between accounting and tax profit — usually accounting > tax profit
- Use of financing mechanisms, i.e. R&D partnership, special purpose entities (Enron)
- Unexpected large asset write-offs (goodwill/loan-other receivables)
- Large fourth quarter adjustments (see appendix)
- Audit qualification or change in auditors
- Poor internal governance systems
- Related-party transactions