ACCT 30001

Financial Accounting Theory

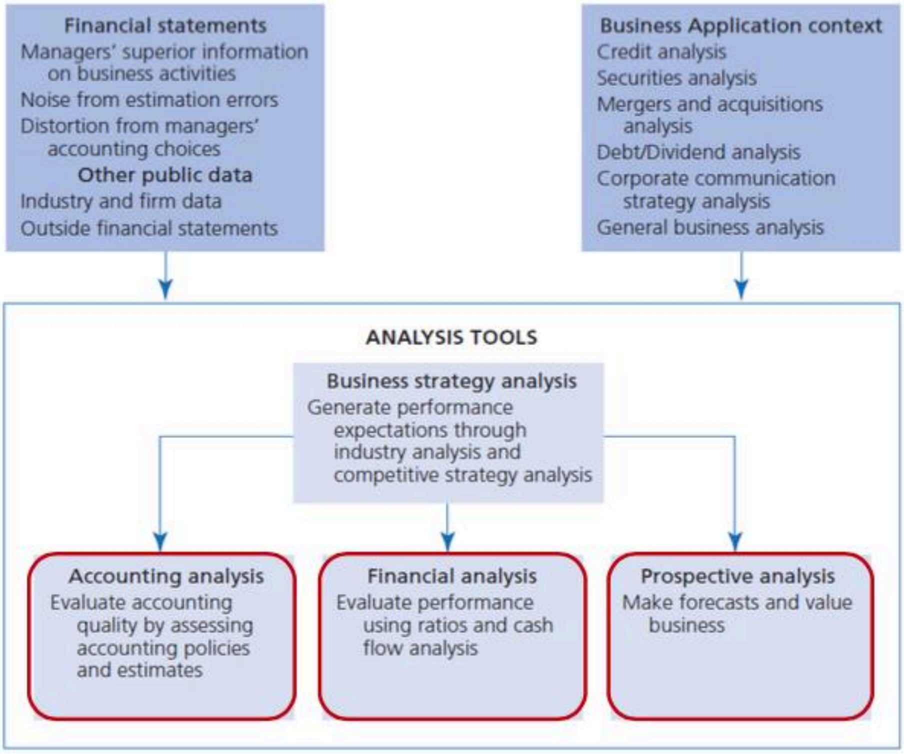
Complete Study Notes

#5 ACC ANALYSIS & EARNINGS MANAGEMENT

Business Analysis Framework

Illustration

Analysis Using Financial Statements



Intrinsic Value

Definition

- AKA fundamental value
- Value of company (or share) without reference to market value (or share price)

Strategy

Buy	Intrinsic value > market value
Sell	Intrinsic value < market value
Hold	Intrinsic value = market value

Accounting Analysis

Definition

- AKA 'earnings quality' analysis
- Evaluate accounting quality by assessing accounting policies & estimates

Purpose

- Evaluate the degree to which a firm's accounting captures its underlying business reality
    - Identify areas of accounting flexibility
    - Evaluate appropriateness of accounting policies and estimates
    - 'undo' any apparent distortions

Financial Analysis

Definition

- Evaluate performance using ratios and cash flow analysis

Types

- Ration analysis
  - Evaluate a firm's product market performance and financial policies
- Cash flow analysis
  - Evaluate a firm's liquidity and financial flexibility

Prospective Analysis

Definition

- Make forecasts and value business

Purpose

- Estimate fundamental (intrinsic) value of a company (or share)

Basis

- Present value theory (time value of money)

Notes

- While value of a firm is a function of its future cash flow performance
- It is also possible to assess a firm's value based on firm's current book value of equity, and its future return on equity (ROE) and growth.

Accounting Analysis

Introduction

Purpose

- Evaluate the degree to which a firm's accounting captures its fundamental value
- And to undo any accounting distortions

Financial Reporting in Capital Markets

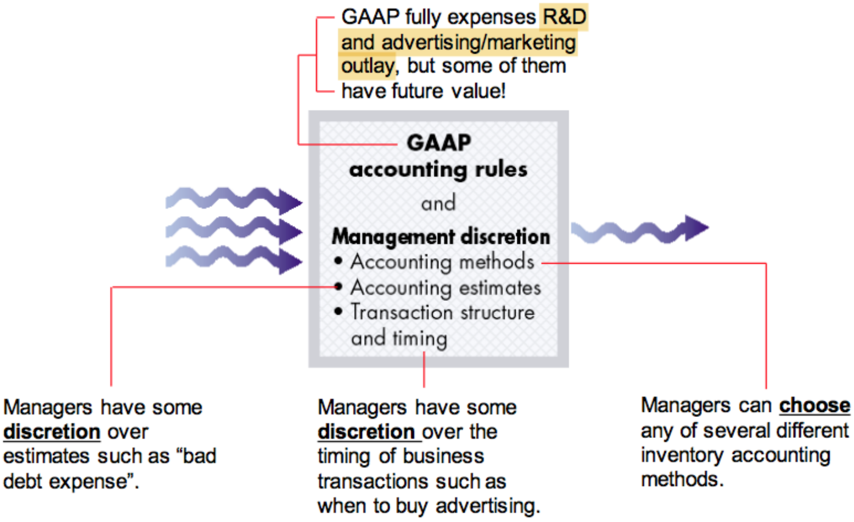
- In capitalist economy, match savings to business investment opportunities is complicated
  - Entrepreneurs typically have better info. than savers on value of opportunities
  - Communication by entrepreneurs to investors = not completely credible, given that they have an incentive to inflate the value of their ideas
  - Investors lack financial sophistication to differentiate among various business plans

Accounting System Features

- Accrual accounting
  - Corporate financial reports use accrual rather than cash accounting
  - Effects of economic transactions are recorded based on expected, not necessarily actual, cash receipts and payments
- Manager's insider information
  - Is a source of both value and distortion in accounting data
- Business analysis, thus
  - Attempts to reveal managers' inside information
  - From public financial statement data

How Financial Accounting 'Filter' Sometimes Works

Illustration



Factors that May Influence Reporting Fundamental Values

- GAAP accounting rules
  - *E.g. GAAP fully expenses R&D and advertising / marketing outlay*
  - *But some of them have some future value – not reflected in financial statements*
- Management discretion
  - Accounting methods, *e.g. different depreciation / inventory accounting*
  - Accounting estimates, *e.g. bad debts*
  - Transaction structure and timing, *e.g. when to buy the advertising*

Overview

Rationale

- Financial reporting information is noisy and biased
  - Even in the presence of accounting regulation and external auditing
- If potential distortions are large, accounting analysis can add considerable value
  - Important precondition for effective financial analysis
  - Quality of financial analysis and inference drawn depend on the quality of the underlying accounting information, the raw material for analysis
- 'Briloff effect'
  - Example of 'added value' in accounting analysis
  - Reviewed financials and criticised accounting policies
  - Average market reaction and cumulative abnormal returns decrease
  - Conclusion: accounting information / analysis actually do help managers to value the firm better

Fundamental Analysis

- Assessment of a firm's performance and prospects
- Using published financial statements
- And possible other forms of publicly available information

Earnings Management

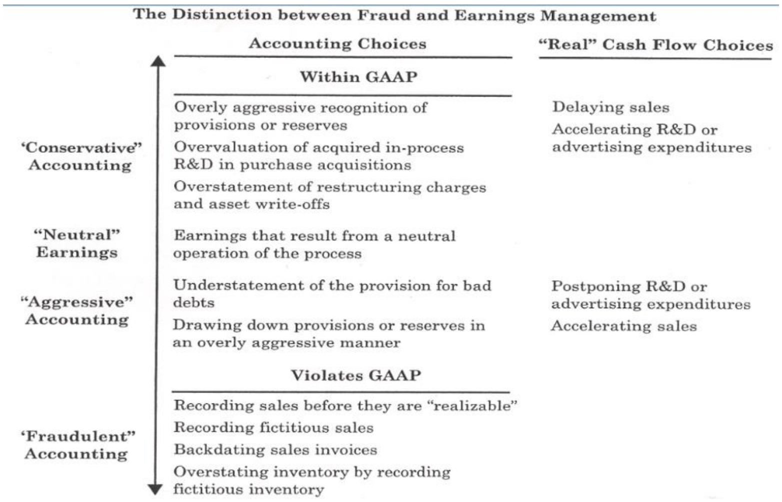
Introduction

Definition

- Broad level definition, earnings management is
    - Process of manipulating financial statement numbers
    - Through accounting adjustments, real activities or both
- Choice taken by a manager of accounting
    - Affect earnings so as to achieve
    - Some specific reported earnings objectives
    - May be not only one choice ,combination of many choices

Fraud Vs. Earnings Management

- Illustration



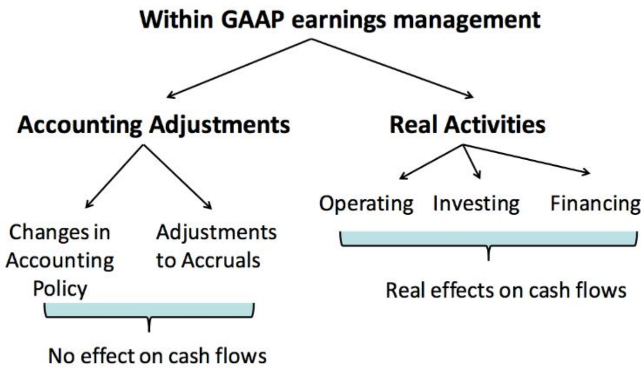
The Distinction between Fraud and Earnings Management

	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	

Methods to Manipulate Earnings

Overview

- Within GAAP Earnings Management



- Real activities have CF effects – 3 types from CFS
    - Operating: anything to do with the normal operations
    - Financing: *e.g. when do I pay off the debts*
    - Investing: *e.g. R&D, hiring most talented people, maintenance, training, etc.*
- Accounting adjustments do not have effect on CF
    - Changes in accounting policy
        - Different timing
    - Adjustments to accruals
        - Haven't paid / received yet

Changes in Accounting Policies

- Less common, reasons:
    - Difficult to change accounting policy period to period (i.e. frequently)
    - Extensive disclosure required in financial statements
- E.g. change the depreciation method / useful life of a non-current asset
- Lecture example:
    - Time Warner Telecom (2008 Annual Report):
    - "During the first quarter of 2007, we evaluated the depreciable life used for fiber assets and determined that to better reflect the economic utilization of those fiber assets, the lives were extended from 15 years to 20 years, or the lease term, if shorter, for leased fiber assets."

Adjustments to Accruals

- Types
    - Aggressive revenue recognition
    - Deferring expense recognition
- Lecture example
    - Revenue: Computer Associates, record all PV of license receivables upfront on long-term contracts; Enron, use mark-to-market accounting to recognise revenue upfront
    - Cost: Dell, had under-booked warranty liabilities between 2003-07
- Can market see through accounting choices?
    - Negative relationship, accounting accruals and future stock returns
    - Trading strategy: long low accruals, short high accruals

Iron Law of Earnings Management

- Net income = cash flows +/- accruals
- Typical accruals
    - Depreciation and amortisation
    - Increase/decrease in receivables/payables, inventories
    - Prepayments / unearned revenues
    - Provisions and write-offs
- Iron law: accruals reverse
    - In long run, net income = cash flow
    - $\sum accruals = 0$

Classification Shifting

- Try to make the operating look good by
    - Shift normal operating costs to one-off items
    - Shift non-operating income to operating income

Real Activities Manipulation

- Examples

Operating	Financing	Investing
• Boost sales through excessive discounts and lenient credit terms • Reduce overhead per unit sold by overproduction • Cut R&D, advertising, maintenance costs, etc.	• Debt early repayment	• Bost income through asset or security sales

Patterns of Earnings Management

Big Bath

- Manipulate a company's Y/S to make poor results look even worse
- Often implemented in a bad year to enhance artificially next year's earnings
- Or e.g. **change of CEO, to demonstrate new CEO efforts**

Income Minimisation

- Less extreme than earnings big bath

Income Maximisation

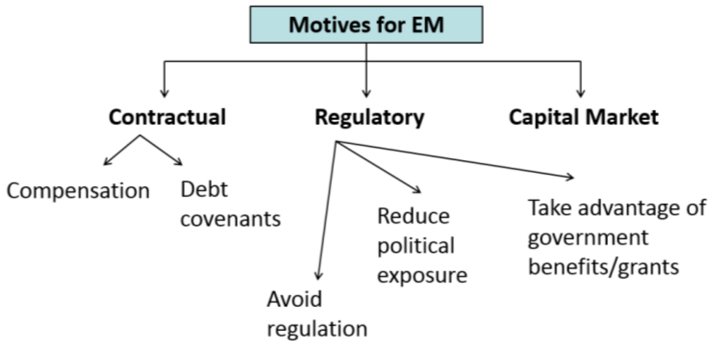
- Accounting choices to maximise present period earnings

Income Smoothing (Cookie Jar)

- Use of accounting techniques to level out net income fluctuations from one period to next

Motives for Earnings Management

Overview



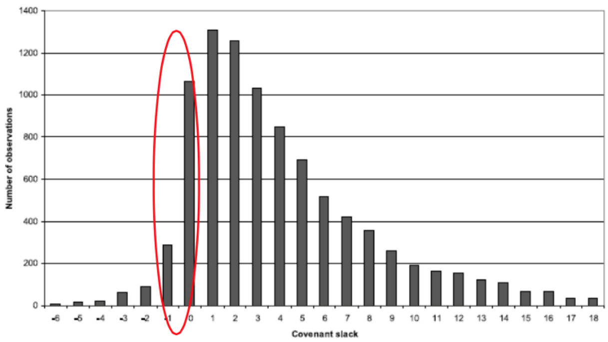
Contractual: Bonus Scheme Hypothesis

- To maximise the cash bonus of the management

Contractual: Debt Covenants Hypothesis

- To avoid debt covenant violation
- Evidence
    - Covenant slack = actual current ratio – required ratio in lending agreement
    - Negative covenant slack = covenant violation
    - Abnormally high proportion of firms with zero or slightly positive slack

Distribution of covenant slack



Contractual: CEO Change

- New CEO 'takes a big bath'
    - E.g. large write downs, write-offs of assets, large negative discretionary accruals
- Blame previous management
- Earnings 'turnaround' in next period – new manager takes credit

Regulatory: Political Motivations

- Granting of tariff protection to firms in industries are unfairly affected by foreign competition
- Trade commission will consider economic factors such as sales and profits of affected firms
- As a result, affected firms have an incentive to choose accounting policies to lower reported earnings, so as to bolster their case

Capital Market Incentives

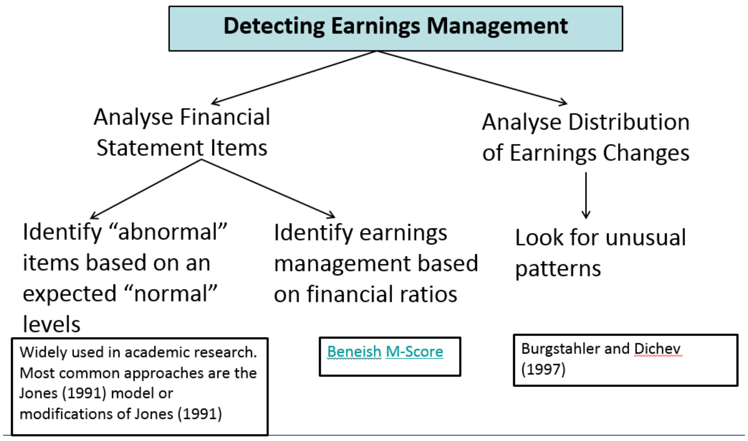
- Surrounding capital market transactions
  - Seasoned equity offerings
  - IPOs
  - Management buyouts
  - Insider trading – to promote share value before selling by manager
- Surrounding earnings announcements
  - Meet / exceed analysts' forecasts, benchmark beating, (otherwise decrease in price)
  - Smooth earnings across time, i.e. reduce volatility, increase stability

Other Incentives for EM

- To influence shareholder perceptions of mgmt performance in board control contests
- Union contract negotiations
- Implicit contracts (customers, suppliers, employees)

Detecting Earnings Management

Overview



Comments

- Very difficult to detect EM
- Accrual-based EM
  - Difficult to know what is the 'normal' level of accruals
- Real activities-based EM
  - Difficult to identify manipulation from real strategic decisions

More on Earnings Management

Two Sides of EM

Overview

Bright side (efficiency)

- Firm value maximisation
- Reduces contracting costs
- Signalling - conveying inside info. to investors

Dark side (oppotunism)

- Maximise manager's payoff
- At the cost of shareholders / creditors

Good EM – Valuation

- To credibly communicate 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
- Why is it credible?
  - Manager foolish to report more earnings than can be sustained
  - Manage reported earnings to an amount management expects will persist

Good EM – Contracting

- To give managers some flexibility in the face of rigid, incomplete contracts
- Bonus contracts based on net income
  - New accounting standards may lower net income and/or increase volatility. May increase contracting costs
- Debt covenant contracts
  - New accounting standards may increase probability of debt covenant violation and hence increase contracting costs
  - Contract violation is costly, earnings management may be low-cost way to work around
- **Link: contract rigidity**

Bad EM – Valuation

- Hanna (1999)
  - Investors / analysts look to core earnings, ignore extraordinary non-recurring items
  - Therefore, management is not penalized for non-core charges,
  - *e.g. write-offs, 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, thereby putting earnings "in the bank"
- ERCs decline in quarters following write-offs
  - **Implications**: decrease in earnings persistence / earnings quality?

Bad EM – Contracting

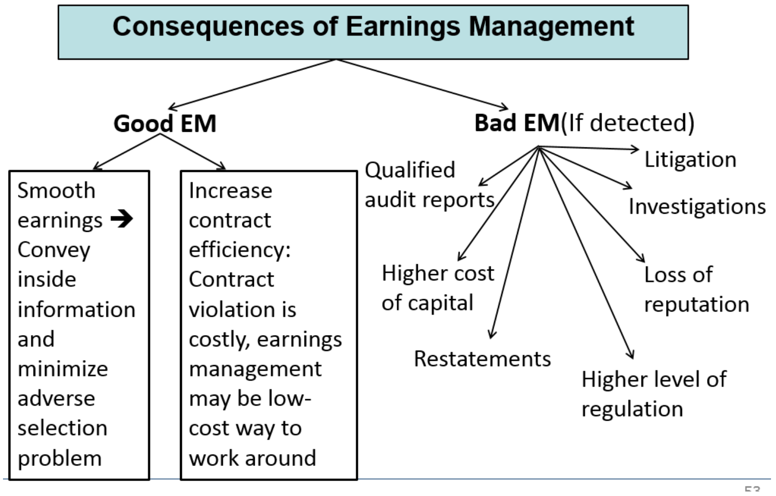
- EM to hide managerial shirking
- EM to maximise manager's bonus (self-interest driven)

Constraints and Consequences

Constraints on EM

- High quality audit
- Restrictions on choices in contracts
- Increased regulation/reduced flexibility in accounting reporting requirements
- Strong effective corporate governance arrangements
- Duration and magnitude of effect (accruals reverse!)
- Regulatory scrutiny and intervention

Consequences of EM



Prevention and Detection

Situations where Manipulation is Likely

- Weak governance structure
  - Inside management dominate the board
  - Weak audit committee, etc.
- Regulatory ratio requirements are likely to be violated
  - E.g. capital ratios for banks and insurance companies
- Transactions with related parties rather than at arm's length
- Special events, e.g. union negotiations
- The firm is 'in play' as a takeover target / in proxy fights
- Unexpected or (too) frequent management changes (big bath accounting)

Identify and Assess Potential Red Flags

- Unexplained changes in accounting when performance is poor
- Unexplained transactions that boost profits
- Abnormal increases in receivables relative to sales
- Abnormal increases in inventory relative to sales
- Increasing gap between accounting-based profit and cash flows
- Increasing gap between accounting and tax profit
- Use of financing mechanisms
  - e.g., R&D partnership, special purpose entities (Enron)
- Unexpected large asset write-offs
  - Goodwill/ loan-other receivables
- Large fourth quarter adjustments
- Audit qualification or change in auditors
- Poor internal governance systems
- Related-party transactions