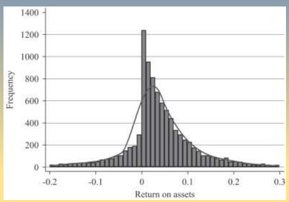
LECTURE 10
DO FINANCIAL REPORTING MATTER?



Caramanis, C. & Lennox, C. (2008) Audit effort and earnings management , *Journal of Accounting and Economics*, 45(1): 116-138

AIM OF LECTURE

- TO SHOW THAT
  - ACCOUNTING INFORMATION INFLUENCE FINANCIAL MARKETS
  - MARKETS CAN PREDICT FUTURE ACCOUNTING INFORMATION
  - ACCOUNTING MANAGEMENT (EARNINGS MANAGEMENT) IS A MEAN TO INFLUENCE STAKEHOLDERS

DO ACCOUNTING MATTERS FOR THE SHARE MARKET?

- NO!
  - There is a lot of information out there, about markets, industry development and so on, corporate accounting information is but a small part (for example Volvo AB 2017 annual report contained 224 pages, of which less than 100 were financial accounting information, while a search of Internet gave >55.7000.000 hits)
  - Corporate accounting information is manipulated by management and the board
  - Auditors are paid by the corporation, so cannot be trusted
  - and so on…

DO ACCOUNTING MATTERS FOR THE STOCK MARKET?

- Well, maybe yes
- It is one of the major sources
- Corporate accounting information is manipulated by management and the board, but we can see through it since we know the tricks
- Auditors are paid by the corporation, but they are professionals and have their reputation to think about, so we can to a large extent trust them
- and so on…

ACCOUNTING NUMBERS AND MARKET PRICE

-Assume semi-strong efficient market, i.e., all public information contained in the stock market price

-Assume that share price is sum of expected net cash flow from dividends discounted by company's risk

-Assume dividend is a function of accounting earning (can only distribute 'Free Capital', which ties dividend to accounting measures)

- P= stock price, *i*= company *i*, t=time, k_i=company *i*:s risk

$$P_i = \sum_{t=1}^{\infty} (\text{Expected Earnings per share})_t \, / (1 + k_i)^t$$

HOW TO FIND THE INFLUENCE OF ACCOUNTING NUMBERS

- Assume CAPM is fairly correct
- R= return for company *i* during period *t*;
- α is constant for company *I*
- *β* is company *i*'s systematic risk, i., how the share price of *i* moves compared to market-wide movements
- R_m is return for the whole market during period t
- *μ* is return specific for the period

$$R_{it} = \alpha_{it} + \beta_{it} R_{mt} + \mu_{it}$$

New information about the corporation, not known by the market, will influence μ_{it}

FOR EXAMPLE…

- On Wednesday the major event for corporation A is the announcement of the annual earnings
- That day the share price of the corporation A went up 1,5%
- That day the overall market return was 0,7%
- Corporation A has α =0 and β =1,2

- $1{,}5 = 0 + 1{,}2 * 0{,}7 + \mu$
- $\mu = 0{,}66$
- Abnormal return=0,66
- Conclusion: The market found positive information in the annual earnings announcement that they did not know about before and that influenced their expectations about future dividend.
- If share price went up 0,84?
- => No new information, either because the information was present or the information was expected.

FINDINGS

- The market reacts on annual earnings announcements: i.e., they use historical costs in making predictions
- The bigger the corporation, the less reaction due to multiple information sources and traders.

- HOWEVER…!
- Estimations due to the accrual system, for example impairments, method of depreciation, stock inventory, are not considered to a large extent, i.e., the 'management' of accounting can have effects on expectations and therefore on stock market price.

- Accounting (Earnings) management can have wealth effects!

THE NEED FOR INFORMATION

Voluntary information from the corporation

- Such as Market development, Markets prospects, View of the economy and the corporation (The letter from the CEO/Chairperson) and so on

- Reducing information asymmetry:

- More information to the analyst => improve forecasts
- Signal of commitment to the market => bonding

- Better predictions => less movement of share price due to information => less risk => lower price of equity

More information is profitable! Especially for smaller corporations.

THE OTHER WAY AROUND

•What should be accounted for?
•Does accounting reflect the valuation of the market
•If MV= Market Value and BV = Book value

$$MV_{it} = BV_{it} + \varepsilon_{it}$$

Error term ε should be small and systematic

THEORETICAL AND EMPIRICAL RELATIONSHIPS

If book values is of importance, then

$$R_{it} = E_{it} / P_{it-1} + \varepsilon''_{it}$$

R = Return of the share; E= earnings; P is share price and ε is error term
(look at p. 455 and p. 472f)

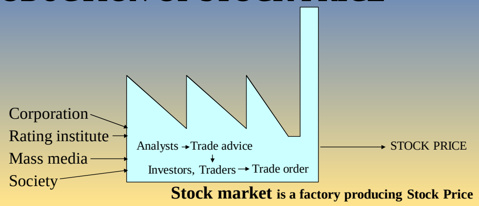
But it has also been found that share price movements preceded earnings,
Stock market can anticipate accounting!
And better for larger corporations (reflecting the information content of the market)

Stock price better predictor of accounting based on fair value than historical value.
Fair value more relevant accounting value for the stock market than historical value.

STOCK MARKET

	Trade mainly on	Function at the market
• Investor	*Fundamental analysis*	*Information*
• Speculator	*Technical analysis*	*Liquidity*
• Saver	*Financial need*	*(Liquidity)*

IMPORTANCE OF ANALYSTS IN THE PRODUCTION OF STOCK PRICE



Stock market is a factory producing Stock Price

Analysts: 100.000 members in Chartered Financial Analyst Institute (CFA)
10 000 analysts in New York
1200 members in The Swedish Society of Financial Analysts
(68% fundamental, 22% technical analysis)

DON'T MIX Efficient markets with market efficiency

Efficient markets: Markets incorporate present information and through its expectations and preferences create a market price

Market efficiency: Markets do not have full information and markets do not have perfect theories of the world. Markets are influenced by fads and fashions, and markets have their preferences. Thus, markets are not efficient in predicting the value of the future cash flow.

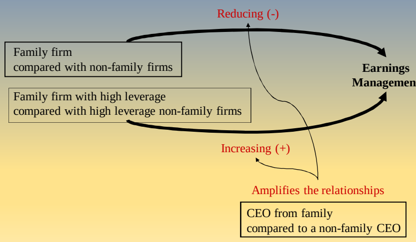
EARNINGS MANAGEMENT, i.e., ACCOUNTING MANAGEMENT

Accounting management: To use the financial accounting system in order to influence decision makers, assuming that the market is not semi-efficient

- Income smoothing: reduce appearance of risk
- Big Bath: empower a new CEO
- Bonus & Reputation management: Revenue management
- Financial risk manipulations: reduce risk if financial default

ACCOUNTING MANAGEMENT HYPOTHESES

Family firms



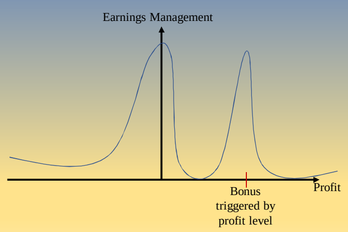
EARNINGS MANAGEMENT HYPOTHESES

Listed firms

Size -
Sales volatility +
Cash flow from operations volatility +
ROA -
Negative earnings +
Leverage +
CEO replacement +
Cross-listing -
Big 4 -
Ownership concentration +

Earnings Management

NON-LINEAR RELATIONSHIPS: THRESHOLDS, FOR EXAMPLE BONUS



WHAT ABOUT THE AUDITORS? ARE THEY ASLEEP?

Accounting management is performed within the accrual system.
It is not fraud.

But
Going Concern Modification (Warning):
To signal in the audit report if the firm is not a going concern, i.e., have a high probability of bankruptcy within one year

P. 451f: No market reaction on a Going concern modification, i.e., market knew it before.
But how could they measure the corporation 12 months after?
The auditor had declared high probability of bankruptcy, so they should not exist 12 months later….

Studies of auditors Going Concern Modification (Warning) in Sweden.
Audit quality indicator:
Did the auditor give warning to those firms that went bankrupt during the next year?
Did corporation go bankrupt but did not get a warning?
Rather low percentage correct action.
Why?
Hard to predict, including business risk
Auditor loyalty to the firm
Auditor do not want to risk a client
One audit firm especially bad….

ACCOUNTING IS ONE, OF SEVERAL, MEANS TO TELL A STORY AND TO CREATE IMPRESSIONS

Disclosure

Reliable information

- Statutory disclosures (Accounting)
- Voluntary disclosure in annual reports
- Other voluntary disclosure (web page, interviews etc)
- Promotion (marketing)

Investors
Analysts
Politicians
Employees
Municipality
Suppliers
Customers
Mass media
etc

PREDICTION OF DISCLOSURE AND ACCOUNTING

Voluntary disclosure → Norm → Standard → Statutory disclosure

1. More disclosure, both statutory and voluntary
2. More standardization
… 3. Eventually more harmonization

Redovisning ger bara en sann bild av företaget

		Anskaffningsvärde minus rak avskrivning	Marknadsvärde	Nuvärde
Inköp	100			
Nyttjandeperiod (år)	10			
Bokfört värde år 4	60			
År 5		50	60	70
Resultaträkning		-10	0	10
Balansräkning		50	60	70
Vinst innan tillgång	100			
Vinst efter tillgång		90	100	110
Balansräkning innan	1000			
Balansräkning efter		990	1000	1010
Avkastning= Vinst/Balans		9,09%	10,00%	10,89%
Kassaflödesförändring		0	0	0
Om utdelning är 10% av vinst?				
Utdelning		9	10	11

Do you think differently about this table than when we meet first time?

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IN A SOCIETY CONSISTING OF INTEREST AND WEALTH,

REGULATED AND AUDITED ACCOUNTING INFORMATION

IS IMPORTANT IN ORDER TO MAKE THE SYSTEM FUNCTION

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PERFORM

GOOD ACCOUNTING & GOOD AUDITING

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EXCURSION INTO ACCOUNTING CHOICE

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WHY REDUCE PROFIT?
– ACCOUNTING CHOICE OF IMPAIRMENTS IN SWEDISH LISTED CORPORATIONS

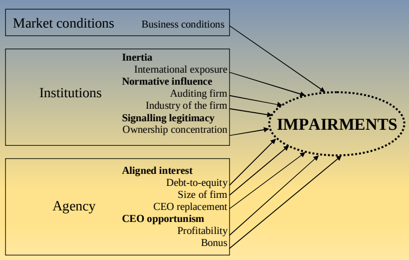
Broberg, P., Collin, S-O, Tagesson, T., Axelsson, M. & Schéle, C. (2011).
'Why reduce profit? – Accounting choice of impairments in Swedish listed corporations?'
International Journal of Accounting and Finance, 3(1):49-71

- Basic assumptions
  - Accrual accounting involve estimates and judgments that affects corporations distribution of profit over time
  - Estimates and judgments mean that interpretations and creative accounting can affect periodic results

This study

- Impairment of Assets according to IAS 36 (“seeks to ensure that an entity's assets are not carried at more than their recoverable amount”)
- Tested on a majority of listed Swedish corporations during the years 2002, 2003, 2004 - 608 firm-year observations

Eclectic Accounting Theory



Hypotheses

Market explanation

H1 The impairments will be reduced from 2002 to 2004

Institutional explanation

H 2 International exposure of the corporation will be *negatively* related to impairments

H3 The auditing firm for the corporation will be related to the usage of impairments

H4 The industry of the firm will be related to impairments

H5 Ownership concentration will *negatively* be related to impairments

Agency explanation

H6 The debt-to equity ratio will be *negatively* related to impairments

H7 Size of the firm will be *positively* related to impairments

H8 CEO replacement will be *positively* related to impairments

H9 Profitability will be *negatively* related to impairments

H10 Bonus will be *negatively* related to impairments

Operationalization I

- Dependent variable
  Impairment: Actual Impairments/Size of assets that can be subject to Impairments.

Independent variables
Year: The years 2002–2004 are represented by dummy variables.
International exposure is represented by
(a) foreign ownership: share of foreign ownership, since it reflects international influence through ownership
(b) foreign listing: stock listed on stock markets other than Stockholm, as it reflects exposure to other stock market standards
(c) foreign subsidiaries: share of subsidiaries that are located outside Sweden, as it reflects exposure to the different countries standards.

Auditing firm is represented by dummies for the four large firms, *other firms* and one category containing the cases when a corporation had signing auditors from different firms.
Industry is coded according to SIX (Scandinavian Information Exchange) and is represented by dummies.

Operationalization II

Ownership is coded in three groups: (1) Controlled by management, which is when no single entity has 5% of the voting rights; (2) Controlled by owners, which is when one or more entities control at least 10% of the voting rights and a representative at the board, or control at least 20% of the shares; (3) Control between these two extremes, which is interpreted as unclear influence. This categorization is made due to the data supply of annual reports and follows Dhaliwal et al. (1982).
Debt-to-equity is defined as (Debt + Provisions) / (Equity + Minority interest).
Size of the firm has been coded as the logarithm of number of employees, as political attention can be affected by how many people are engaged in the corporation.

Operationalization III

CEO replacement: a new CEO has been recorded for the year when the CEO signed the first annual report
Profitability has been defined as (Profit after financial items + Financial costs + impairments) / (Total capital + impairments). Financial costs are not included since it would reflect the financial structure. Impairments are included since we want profitability independent of impairments.
Bonus has been defined as a dummy, indicating bonus to management related to the profit of the corporation. Bonus related to other objectives has not been recorded as impairment influences profit. Options constitute a reward instrument that is not connected to profit but to market valuation, thus including expectations and general business trends.

Hypotheses that cannot be falsified in **RED**

Market explanation

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Main conclusions

- Our main conclusion is that PAT has the strongest explanatory power, but that institutional factors contribute, partly as elements in PAT and to a lesser extent, as an independent theoretical factor.
- Impairments are used to regulate profit, and they are used in the interest of both owners and top management