Table of Contents

Lecture 1: Objective of Financial Report 2

Lecture 2: Recognition 11

Lecture 3: Measurement 17

Lecture 4: Income Reporting and Classification 27

Lecture 5: Ratio Analysis 37

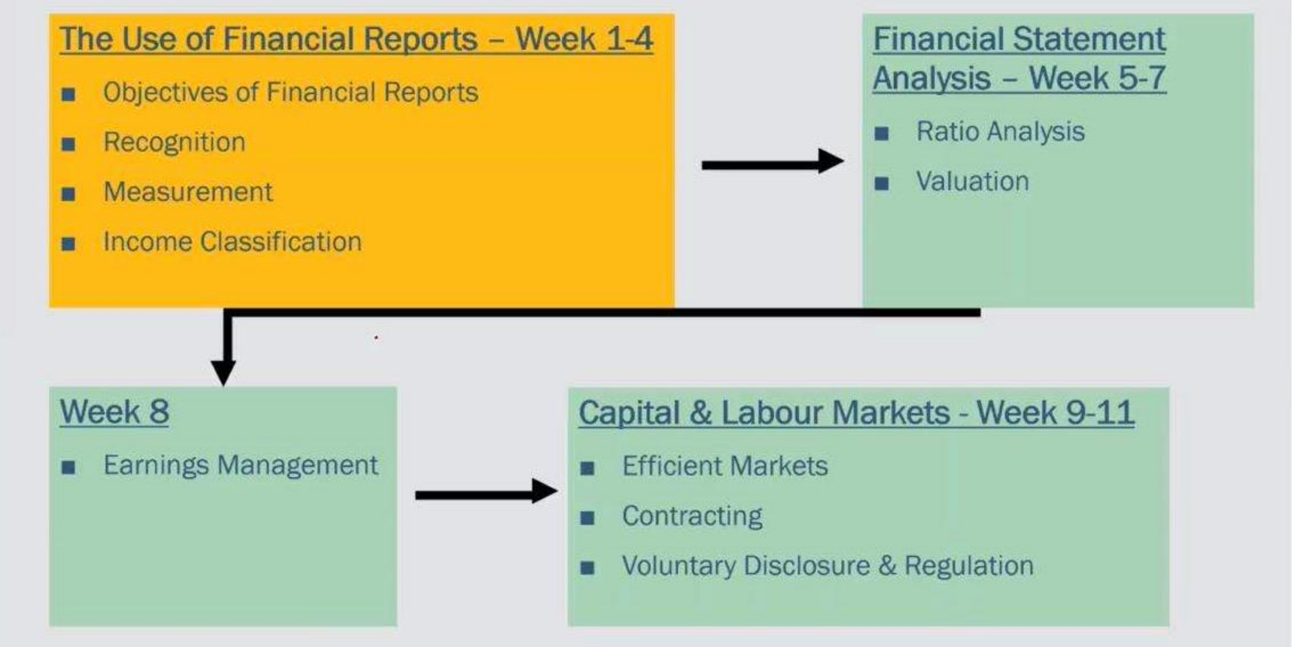
Lecture 6 & 7 Valuation 42

Lecture 8 Earnings Management 50

Lecture 9 Market Efficiency (Capital Market) 60

Lecture 10: Contracting (Labor Market) 70

Class Roadmap:



The Use of Financial Reports – Week 1-4

- Objectives of Financial Reports
- Recognition
- Measurement
- Income Classification

Financial Statement Analysis – Week 5-7

- Ratio Analysis
- Valuation

Week 8

- Earnings Management

Capital & Labour Markets - Week 9-11

- Efficient Markets
- Contracting
- Voluntary Disclosure & Regulation

Lecture 1: Objective of Financial Report

1. Financial reporting is an economic good.

Demand	**Supply**
Demand from investors and lenders. Sources of demand: - Valuation - Stewardship/contracting (monitor manager's performance)	Supply by companies.
Cost	**Benefit**
Cost of auditing and verification etc.	Attract more investors and lenders at a lower cost of capital.

2. What is the objective of financial accounting?

Financial Accounting is an information reporting system designed to relieve information asymmetry in economies and thus can help investors and lenders make decisions on scare resources allocation.

3. What is the objective of financial reporting?

- Valuation of debt and equity

a) Equity investors and creditors need information to forecast future net cash flows and to assess credit risk

- Stewardship/contracting

a) for assessment of past performance of management

b) For writing efficient contracts with debt holders and management, we want the numbers in FR to be prepared in a certain way.

4. What is information asymmetry?

Information asymmetry occurs when one party to a transaction is at an informational disadvantage to the other (i.e. he/she does not know as much as the other party)

5. Types of information asymmetry

	Adverse Selection **(Valuation a.k.a decision usefulness)**	**Moral Hazard** **(Stewardship a.k.a Efficient Contracting)**
Goal	Efficient allocation of scarce resources.	Efficient allocation of capital within the firms.
Definition	A type of information asymmetry where a party to a potential transaction has an informational advantage over other parties.	A type of information asymmetry whereby a party to a transaction/contract can observe their actions in fulfilment of the transaction but the other cannot.
Due to	Opportunistic Behavior	Separation of ownership and control
How FS is used? Objectives? (Two sources of demand for Accounting Information)	For valuation to address adverse selection problems and ensure capital market efficiency.	For stewardship and efficient contracting to address contracting and moral hazard problems.
Parties that suffered	• between shareholders and management • between shareholders themselves	• Lending contract: between management and debtholders • Compensation contract: between management and shareholders Management can undertake actions that are in their own self-interest at the detriment of shareholders and debtholders.
Key difference	• Adverse selection involves hidden information about a firm's future cash flow before transaction.	• Moral hazard involves hidden action, i.e., the manager knows how hard he/she is working but investors do not, after transaction.

Economic Consequences★ Decrease the amount via capital raise (because higher Ke, lower capital raised)	• between managers and investors:↑in information risk → a lower initial share price →↑cost of capital • between investors:↑bid-ask spread →↓liquidity → ↑cost of capital • because price cannot reflect the true value of the asset → Decreased informativeness of prices to guide resource allocation → Increase the miss-allocation of resources between firms	• Moral Hazard Costs of Debtholders - Excessive dividend payments - Asset substitution - Claim dilution - Under-investment • Moral Hazard Costs of Shareholders - Dividend retention and empire building - Pay/perks unrelated to performance - Managers may be tempted to shirk (be lazy) - Risk aversion (safe projects only) - Horizontal problem
How to mitigate? (Solutions)	• Through external reporting: - Mandatory financial reporting - Voluntary information reporting • Other information intermediaries (interpreters) - Financial analysts - The media	Write contracts based on accounting date with both debtholders and shareholders
Key focus*	PV of FCF, relevant Focus on future performance	reliability, conservative → hold mgmt accountable → because the info is relatively reliable, we will not doubt a lot when sign the contract→ decrease contracting cost Focus on past performance

*Thus, we need to consider how accounting standards can satisfy both relevant and reliability? i.e. both objectives.

Important concepts:

What are roles/objectives of financial accounting/reporting?

- There are two main roles of financial reporting.
- (VALUATION OBJECTIVE) Firstly, financial reporting provides useful information to investors in predicting company's future cash flow and discount rate which helps them to make a better valuation. It can reduce adverse selection which can improve operation of capital markets by allocating scarce resources correctly.
- (STEWARDSHIP OBJECTIVE) Secondly, financial reporting reduces moral hazard problem by using some accounting figures as a managerial performance measure and leverage in contracts with debtholders and thus improve operation of managerial labor markets and efficiency of contracts.

If we solve the AS, what positive consequences? Or if we have AS, what will happen? (Negative consequences?)

a) Increased information risk (between managers and investors), and thus a higher cost of capital (especially at IPO)

A firm/manager only has an incentive to issue new shares at prices that either equal the fundamental value or is greater than the true fundamental value otherwise would dilute the wealth of current shareholders. Therefore, potential buyers in the presence of information asymmetry (and thus not knowing the true value of the firm) realize there is some risk the shares may be overpriced. Knowing this they discount the price they are prepared to pay. This lowers the issue price and increases the cost of capital.

If investors know the true firm value i.e. no adverse selection, managers cannot issue shares at higher price.

b) Lower liquidity (due to adverse selection problems between investors) and thus a higher cost of capital

The greater the adverse selection, the greater the bid-ask spread. The buyer is concerned the seller has better information and thus lowers their bid price to protect against information risk of paying too much. The seller is concerned the buyer has better information and thus increases their asking price to protect against the information risk of selling at too lower price. This will decrease the liquidity. Investors value liquidity due to unforeseen consumption shocks and needs. They will thus discount, or alternatively expressed require a higher rate of return/a premium for holding illiquid stocks, for illiquid stocks as they are more costly to hold. The greater the adverse selection the more illiquid are stocks and in turn the greater the cost of capital.

c) Decreased informativeness of prices to guide resource allocation

Prices of stocks can guide resource allocation. High (low) stocks prices can increase (decrease) the flow of resources to that underlying activity as they act as a signal of profitability.

The greater the information asymmetry between the manager and investors, the less likely prices reflect the underlying true value of the firm. Shareholders will be hard to distinguish between poor or good firms. Therefore, in turn this will increase the miss-allocation of resources if prices are used as a signal to guide resource allocation.

What are risks of MH to Shareholders/debtholders?

To Debtholders:	**To shareholders:**
As after the bank has lent the money, the actions taken by the counter party in fulfilment of the transaction cannot be observed. Debt contracts provide managers with incentives for:	- Dividend Retention: If there is no positive NPV project and company has excessive cash, the company should distribute to shareholders as dividends to let shareholders invest in other companies.
- Excessive dividend payments: CEO may distribute all cash received from lender to shareholders. Simultaneously, shareholders and the firm are separate legal entities which in turn gives rise to limited liabilities. Debt holder bears the risk of losing all the money.	CEO may retain dividend and act in their own interests due to 3 reasons: a) Empire building: if the cash is retained and dividend is not distributed, the firm is larger than what it would be. For self-interest, CEO would prefer to be corporate manager for a larger rather than a small firm. As generally larger firm has higher executive compensation and in the managerial labour market, CEO has a greater reputation of being the manager of a large firm. b) Excess consumption of perquisites: retained cash can be invested into projects in CEO's best interests though they may not have positive NPV. c) Perks: e.g. buy an airplane or rebuild a building.
- Asset substitution: Safe assets are substituted for risky assets. Lenders prefer to lend to firms with safe tangible assets. Shareholders can benefit from the potential upside of investment in risky assets. However, lenders do not share the benefit but bears the costs of potential downside risk.	- Risk Aversion (firm's beta): shareholders only care about systematic risk (the firm's beta) but not the firm's specific risk because they hold diversified portfolio. Hence, shareholders would invest in any project with positive NPV. However, CEO may reject such a project due to 2 reasons: 1. CEO's pay is link to earnings; they are risk adverse, so they don't like volatility. 2. CEO may look at his individual portfolio which consists of mainly human capital that is highly correlated to firm's success. Hence, CEO is risk averse in relation to firm specific risk not like shareholders. This gives rise to a moral hazard cost to equity shareholders as a positive NPV

	project is forgone. This does not represent a cost to debt holders as they have an asymmetric payoff function and do not benefit from the upside of risky project.
- Claim dilution: After the firm has received the first loan, it gets loans from other lenders and gives these loans greater priority over firm's assets than the original loan. The first lender's claim is diluted.	- Horizon problem: NPV takes account expected future cash flow into perpetuity. Upfront costs, first 2-3 years negative cash flows. CEO may concern about labour market reputation and compensation in the immediate short-term, those projects with upfront costs may be rejected even with long-run positive return.
- Under-investment (not too concerned): If a project is only benefit to debtholders but not shareholders, manager will not invest in it.	- Pay/perks unrelated to performance Buy jets.

Why debt is cheaper (less costly) than equity?

The cost of debt is likely to be lower. This is because the risk of debt is lower as the variance of cashflows is lower and the adverse selections costs are lower for debt compared to equity. The adverse selection problems are greater for equity than debt for a number of reasons.

- First, for debt the nominal face value of payoffs are known.
- Second, when equity is offered, outside investors infer that managers believe the current stock price is overvalued. Aware of this, market participants discount firm value to reflect adverse selection costs.

Thus, the required returns on debt and equity are related to perceived adverse selection costs, implying that debt should be cheaper than equity as a source of external capital, forming a "pecking order".

What is the fundamental problem (conflict) of financial accounting 2 objectives?

- For valuation purposes, investors prefer the accounting numbers can be more relevant, because they need it for predicting future cash flow and discount rate.
- However, for efficient contracting purpose, the accounting figures should be more reliable and conservative because we write contract based on those figures in reports.
- This implies that the interests of investors and manager may conflict. Investors prefer current value accounting, but managers do historical cost accounting which can better reflect manager's effort. → which means that using the same set of accounting information may cannot achieve both objectives.

What is efficient contracting and how it reduces moral hazard costs?

- Efficient contracting focus on the role of financial accounting info in moderating info asymmetry between contracting parties.
- Shareholders contract with managers to link pay to reported firm performance. In other words, the compensation to managers will depend on his past performance (e.g. net income in FS). This decrease managers incentive of opportunistic actions (e.g. Buy jets) and lower the MH costs.
- Debtholders contract with firm to incorporate a covenant into a borrowing contract. For eg, by promising a maximum leverage, debtholders will decrease the interest rate because the risk is lower. They can use the figures in the FR to calculate the leverage. This will benefit the firm.

6. Accounting conventions:

    - Accrual: Accruals = net profit – cash from operations
        - Solve the matching and timing problem
            - Relevant and reliable?
            - Accrual accounting is more reliable but subject to estimation and errors?
    - Conservatism: Higher standard of verification required for recognition of gains/assets versus losses/liabilities
        - Non-recognition of assets with uncertain payoffs
            - Internally generated intangible assets
        - Recognition of unrealized losses but non-recognition of unrealized gain for recorded assets (more timely recognition of losses relative to gains)
            - Impairment test (AASB 136)
        - Lower-of-cost or market valuation of inventory

Why shareholders and lenders prefer to conservative accounting?

- Lenders face payoff asymmetry, they care more downward performance. Thus, they demand more reliable info to help protect against opportunistic manager policies that hide losses and record unrealized gains.
- Shareholders demand info to encourage responsible manager effort and limit opportunistic actions. Allows to recognize negative NPV project ASAP.

Explain how conservative accounting can contribute to efficient contracting (3 marks)

- Def: Conservative accounting is more timely recognition of losses than gains.
- Conservative accounting can contribute to more efficient contracting with managers via:
  - Acting as a constraint on managerial opportunism by not allowing gains to be recognized until realized (thus limiting discretion)
  - Timely recognition of losses, even if unrealized, allows timely recognition of negative NPV projects that managers may have engaged in
- Conservative accounting can contribute to more efficient contracting with debtholders via:
  - Conservatism limits dividends, increasing debtholder security
  - Conservatism gives debtholders early warning of financial distress
  - Debtholders lower required interest rate, increasing debt contract efficiency

7. Do we know the true value (income) of the firm?

- NO! We don't know the future!
- True net income = change in wealth (value) of the firm between t and t-1
- Why?
  - PV estimates are subject to substantial error
  - Markets are incomplete

8. Managers reporting choices can be subject to both bias and random errors and be motivated by:

- Informativeness
- Opportunistic (acting in self-interest)

9. ROE (accounting based) VS Share price return (finance based)

- the distribution of both accounting ROE and annual share returns is highly non-normal. Specifically, ROE is severely left-skewed and share returns are severely right skewed. The distribution of these two economic variables is severely skewed so that we will observe a significantly more extreme observations, while still of relative low probability, than a normal distribution.

- The underlying reason for the shape of the accounting distributions:

  - bias in measurement due to the conservative accounting principles of the immediate expensing of investment in internally generated intangible assets and the immediate recognition of unrealized economic losses but restricted recognition of economic gains until realized.

- Implications of the nature of the two distributions for the use of accounting information to analyse economic performance:

  - accounting information is not perfect, it does not fully reflect the economic performance of firms in the current period assuming share returns represent an unbiased measure of performance. The right skew of share returns due for example extreme positive economic shocks such as successful drug trial, oil discovery, is not being reflected in accounting information in that period. This does not mean that accounting information is not useful, rather it implies that accounting information has distinct properties which must be understood so that it can be effectively used.

10. bid-ask spreads

- Def: Bid-ask spreads is the difference between the proposed “sell” and “buy” prices.

- A significant determination of bid-ask spreads is adverse selection because information asymmetry between the buyer and the seller increases the bid-ask spread. This occurs because potential buyers or sellers could “lose” on trades with better-informed counterparties. Therefore potential buyers or sellers to price protect themselves offer a lower (higher) price to compensate for their losses from an “adverse” transaction.

- Thus the spread is determined by the probability of trading with a more informed counter-party and therefore the magnitude and quality of “public information” about a firm’s stock. The greater the known information set about a firm the lower the risk of trading with a more informed counter-party.