Aalto University
School of Business

Financial Statement Analysis (22E00100)

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Course Objectives

- **To provide you with a framework for analyzing financial statement information**
- **To show you how to apply this framework to a variety of business decisions**
  - Investment decisions
  - Lending and borrowing decisions
  - Merger & acquisition decisions
- **Integrate key concepts from accounting, finance, strategy and economics**

Introduction – Setting the scene

- A critical challenge for any economy is the optimal allocation of resources/savings to investment opportunities.
- In a market-based economy, there are usually many entrepreneurs and existing companies that would like to attract savings, which are typically widely distributed, to fund their business ideas.

Introduction

- While both savers and entrepreneurs would like to do business with each other, matching savings to business investment opportunities is complicated for at least two reasons.

  1. Entrepreneurs typically have better information than savers about the value of business investment opportunities and incentives to overstate their value. Savers, therefore, face an ‘‘information problem’’ when they make investments in business ventures.
  2. Once savers have invested in their business ventures, entrepreneurs have an incentive to expropriate their savings, creating an ‘‘agency problem’’.

Introduction – Information Problem

- The information or “lemons” problem arises from information differences and conflicting incentives between entrepreneurs and savers.
- It can potentially lead to a breakdown in the functioning of the capital market (Akerlof, 1970).

Introduction – Information Problem

Consider a situation where half the business ideas are “good” and the other half are “bad”. Both investors and entrepreneurs are rational and value investments conditional on their own information. If investors cannot distinguish between the two types of business ideas, entrepreneurs with “bad” ideas will try to claim that their ideas are as valuable as the “good” ideas. Realizing this possibility, investors will value both good and bad ideas at an average level. Therefore, if the lemons problem is not fully resolved, the capital market will rationally undervalue some good ideas and overvalue some bad ideas relative to the information available entrepreneurs.

Introduction – Agency Problem

- The agency problem arises because savers that invest in a business venture typically do not intend to play an active role in its management – that responsibility is delegated to the entrepreneur.
- Consequently, once savers have invested their funds in a business venture, the self-interested entrepreneur has an incentive to make decisions that expropriate savers' funds.

Introduction – Agency Problem

For example, if savers acquire an equity stake in a firm, the entrepreneur can use those funds to acquire perquisites, pay excessive compensation, or make investment or operating decisions that are harmful to the interests of outside investors (Jensen and Meckling, 1976).

Introduction – Agency Problem

Alternatively, if savers acquire a debt stake in a firm, the entrepreneur can expropriate the value of the investment by issuing additional more senior claims, by paying out the cash received from savers as a dividend, or by taking on high risk capital projects (Smith and Warner, 1979).

The issuance of new senior debt and payment of dividends reduces the likelihood that there will be sufficient resources available to fully repay existing or lower priority debt in the event of financial distress, benefiting the entrepreneur.

Equityholders' demand for financial reporting and disclosure

- To facilitate the exchange of resources between the providers and users of equity capital, current and prospective investors demand information about the firm's financial performance, which they often use in enforcing contracts among various parties.
- Financial information is useful to investors for at least two reasons: equity valuation and evaluation of management performance.

Equityholders' demand for financial reporting and disclosure

- In a typical public corporation, shareholders delegate the firm's day-to-day operating decisions to management, creating an agency relationship between the shareholders, as principals, and management, as agents (Jensen and Meckling, 1976).
- Through the board, the firm's shareholders hire, monitor, reward, and incent management to act in the shareholders' best interests.
- This naturally creates a demand for the measurement of periodic performance, i.e., the management's output in a period resulting from the management's actions in the period.

Lenders’ demand for financial reporting and disclosure

- In the debt contracting process, lenders bear downside risk but have no upside potential.
- Absent a mechanism to credibly mitigate their downside risk, lenders would either refuse to lend or require a high rate of return.
- Accordingly, lenders favor mechanisms that mitigate their downside risk.

Lenders' demand for financial reporting and disclosure

- Given their payoff function, debt holders demand financial statements that supply information about (i) the value of the firm's assets in the event of liquidation, (ii) the extent of other claims on those assets, and (iii) firm performance.
- Credible financial information benefit lenders *ex post* through the timely signaling of default risk, as manifested by accelerated covenant violations, and benefit borrowers *ex ante* through lower initial interest rates.

Demand for financial statements

Group	Uses
Shareholders and investors	• Investment decisions
Managers and employees	• Performance assessment • Compensation contracts • Company-sponsored pension plans
Lenders and suppliers	• Lending decisions • Covenant compliance
Customers	• Seller's health • Repeat purchases • Warranties & support
Government & regulators	• Mandatory reporting • Taxing authorities • Regulated industries

A closer look at professional analysts

- Financial statement users ("analysts") have diverse information needs, because they face **different decisions** or use **different approaches** to make the same decision
- Analysts include investors, lenders, financial advisors, customers, suppliers, managers, employees…even auditors

Equity investors
- Fundamental value
- Liquidation value

Creditors
- Credit risk
- Financial flexibility

Independent auditors
- Fraud risk factors
- Analytical review

Supply of financial statements

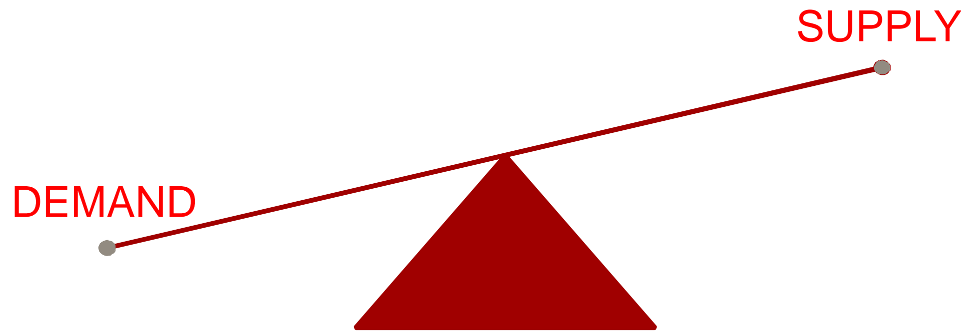
- Mandated reporting is designed to insure minimum levels of reporting
- Companies frequently make voluntary disclosures that go beyond the minimum requirements
- Voluntary disclosure is guided by cost/benefit considerations.

Disclosure benefits
- Low cost access to capital
- Avoid the “ lemons” problem

Disclosure costs
- Information production
- Competitive disadvantage
- Litigation exposure
- Political exposure

- Companies that confront different financial reporting costs and benefits are likely to choose different accounting and reporting practices

Economics of accounting information



Financial statements are demanded because of their value as a source of information about company performance, financial condition, and stewardship of resources.

The supply of financial information is guided by the costs of producing and disseminating it and the benefits it will provide to the company.

Interaction between financial reporting and disclosure

- Financial statements contain information that is predominantly “historical” or backward-looking, but verifiable at relatively low cost by independent auditors.
- Conversely, audited financial reporting is a relatively inefficient mechanism for communicating forward-looking information to outsiders, because it is relatively costly to verify independently.

Interaction between financial reporting and disclosure

- Voluntary disclosure of information that is privately known only to managers has a primarily informational rather than contracting role.
- However, this potential cannot be unlocked if managers cannot credibly commit to be truthful (because unverifiable disclosures by themselves are untruthful and hence uninformative).
- A signal is credible to its recipient only when it is costly to convey the signal (Spence 1973).

Interaction between financial reporting and disclosure

- Reporting *ex post* financial outcomes (such as revenues, earnings and total assets) that are both accurate and independent of management manipulation permits outsiders (such as boards, analysts, lenders and investors) with a means of evaluating the truthfulness of past management disclosures.
- In turn, the expectation that actual outcomes will be accurately and independently reported serves to discipline managers to make more truthful and hence more informative voluntary disclosure *ex ante*.

Interaction between financial reporting and disclosure

- Audited financial reporting and voluntary disclosure of managers' private information are complementary mechanisms for communicating with investors, not substitutes.
- For this reason, their economic roles cannot be evaluated separately by researchers, regulators or standard-setters.
- Note that the confirmatory role of audited financial statements most likely is weaker when the disclosure cannot be so directly linked to specific financial statement outcomes (e.g. product market strategies).

Summary

Accounting information plays two important roles in market-based economies:

1. It allows capital providers (shareholders and creditors) to evaluate the return potential of investment opportunities (the ex-ante or valuation role of accounting information).
2. Second, accounting information allows capital providers to monitor the use of their capital once commited (the ex-post or stewardship role of accounting information).