

ACCT 30001 Financial Accounting Theory and Valuation course

The subject is a capstone theory and financial statement analysis/valuation subject that is designed to teach the underlying concepts that explain the production and enable the use of financial reports for valuation and analysis. We also consider the use of financial reports for contracting with executives and lenders and if there is a need for regulation. The applied concepts taught will be useful to students in practice both as preparers and users.

1. Objective of Financial Reports:
 - Valuation and Stewardship
 - Social Welfare Consequences (Adverse Selection and Moral Hazard)
 - Statistical Properties of Information
 - i. Bias
 - ii. Precision
2. Recognition
 - Brief recap of GAAP Recognition rules across all elements
 - Direction and Magnitude of Biases in ROE
3. Measurement
 - Brief recap of Measurement Rules across all elements
 - Direction and Magnitude of Biases and Random Errors in ROE
4. Definition and Classification of Income
 - Economic Income and Alternate Concepts of Income
 - True Income unknown
 - GAAP Net Profit and OCI
 - Street Earnings (Underlying earnings, EBIT and EBITDA)
 - Basic and Diluted EPS
5. Ratio Analysis and Fundamental Economic and Accounting Properties of Information
 - Ratios
 - Impact of Accounting Recognition and Measurement Principles on Ratios
 - Economic Properties (e.g persistence and mean reversion)
6. Valuation
 - Residual Income
7. Valuation
 - Free Cash flow (as a vehicle to discuss Accruals versus cashflows)
 - Multiples
8. Earnings Management
 - Incentives
 - Methods
9. Efficient Markets
 - Definition and Implications
 - Empirical Evidence
10. Contracting
11. Economics of Voluntary Disclosure and Regulation
12. Conclusion

Lecture 1: Objective of financial accounting

Objective of financial accounting

Financial Accounting is an information reporting system designed to relieve information asymmetry (adverse selection and moral hazard) in economics.

Demand for accounting information

1. Valuation objective: Address **adverse selection** problem and ensure capital market efficiency.
2. Stewardship and efficient contracting: Address contracting and **moral hazard** issue.

Information asymmetry

Occurs when one party to a transaction is at an informational disadvantage to the other.

- **Adverse Selection (Valuation) - <M-S, S-S>**
 - Type of information asymmetry whereby a party to a potential (BEFORE TRANSACTION) transaction have an information advantage over other parties.
 - Adverse selection involves hidden information about a firm's future cash flow before transaction.
- **Adverse Selection in Capital Markets**
 - Managers know more about the current condition and future prospects of firm than outside investors. (Managers may behave opportunistically)
 - Some investors may also know more than other investors. (Insider news)
- **Consequences**
 - *Increase information risk (between managers and shareholders) and thus increase cost of capital*
 - ❖ Managers only has incentive to issue new shares at prices equal or greater than true fundamental value. They will not issue shares below true value of firm as it would dilute the wealth of current shareholders while issue when above true value to increase wealth of current shareholders. Knowing this, shareholders discount the price they are prepared to pay. This lowers the issue price and increases the cost of capital.
 - *Lower liquidity (between shareholders) and thus increase cost of capital*
 - ❖ Info asymmetry ↑, increased estimation risk of investors, bid-ask spread between the potential buyers bid price and the sellers ask price for shares ↑. The buyer is concerned the seller has better information and thus lowers their bid price to protect against information risk of paying too much and vice versa. As spreads become greater there is no trading in stock as investors cannot agree on a price. Investors value liquidity due to unforeseen consumption needs (e.g. surgery). They will thus discount, or alternatively expressed require a higher rate of return, for illiquid stocks as they are costlier to hold.
 - *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.

Therefore, this will increase the misallocation of resources if prices are used as a signal to guide resource allocation.

- How to mitigate adverse selection?
 - Mandatory financial reporting: signaling (hire auditors to show quality of FS)
 - Voluntary information reporting
 - Information intermediaries (Financial analysts and media)

- **Moral hazard (Stewardship/efficient contracting) – <M-S, S-D>**
 - Type of information asymmetry whereby a party to a transaction/contract (AFTER TRANSACTION) can observe their actions in fulfilment of the transaction but the other cannot.
 - Moral hazard involves hidden action, i.e., the manager knows how hard he/she is working but investors do not, after transaction.

- *Manager-Shareholder contract*
 - Moral hazard occurs due to separation of ownership and control. After receiving money from investor, managers act in their own best interest rather than the interests of investors.
 - It is effectively impossible for shareholders and creditors to observe managers' effort:
 - ❖ Managers may be tempted to shirk
 - ❖ Pay/perks unrelated to firm performance
 - ❖ Dividend Retention and Empire Building
 - ❖ Risk Aversion (safe projects only) – projects may have positive ROR but due to self-interest, chose not to invest in volatile projects as pay link to earnings.

- *Shareholder-Debtholder Contract*
 - The debtholder is the principal and the manager acting on behalf of shareholders is the agent.
 - Debt contracts provide managers with incentives for:
 - ❖ Excessive dividend payments
 - ❖ Asset substitution (invest in risky project because shareholder enjoy upside whereas debtholder do not)
 - ❖ Claim dilution
 - ❖ Under-investment (do not invest in low positive ROR projects because debtholder given priority before shareholder when liquidation)

Role of Financial Reporting

- Valuation – to reduce adverse selection, thus improve operation of capital market
 - Value of equity share = future payoff/ discount rate
 - Supply decision useful information to capital markets so investors have better info to predict future cash flow and discount rate

- Efficient contracting – to reduce moral hazard, thus improve operation of manager labour markets and efficiency of contracts

- Link manager's pay to firm performance (M-S) – low moral hazard cost
- Use debt covenant when enter borrowing contracts (S-D) – lower interest rates

Fundamental problem of Financial Accounting

- The best measure of net income to control adverse selection is not the same as the best measure to motivate manager performance
- Implies the interests of investors & manager conflict
 - Investors – might prefer current value accounting
 - Managers – does HCA, conservatism better reflect manager effort

Accrual accounting

- Under the accrual basis of accounting, the effects of transactions are recognized when they occur and can be reliably measured (and not as cash is received or paid)
 - Alleviates *timing* and *matching* problems associated cash accounting
- Accruals = Net Income – Operating Cash Flows
- Arguably more informative for both valuation and stewardship objectives than cash from operations

Revenue Recognition

Revenues are recognized when both earned and either realized or realizable

Expense Matching

Accrual Accounting dictates that expenses are matched with their corresponding revenues

Conservation accounting

- Higher standard of verification required for recognition of gains/assets versus losses/liabilities
- A bias downwards in the measurement of net assets of a firm
- Examples:
 - ❖ Non-recognition of assets with uncertain payoffs
 - ❖ Internally generated intangible assets (AASB 138)
 - ❖ 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

Sources of Demand for Conservatism and Reliability: Stewardship/Contracting

- Reliability
 - Lenders face payoff asymmetry as they can lose heavily if firm does poorly but do not directly share in gain in firm does well
 - Lenders demand reliable information to have early warnings of financial distress and help protect against opportunistic manager policies that hide losses and record unrealized gains

- Conservatism
 - Lenders demand conservative information:
 - To help predict financial distress
 - Limits dividends which increases debtholder security
 - Reporting unrealized losses helps predict financial distress and limits dividends
 - Shareholders demand conservative information for stewardship purposes
 - 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

- Efficient contracting demand for reliable and conservative information conflicts with Conceptual Framework
 - Framework more future-oriented (i.e relevant) information fair value accounting
 - Reliability downgraded to an enhancing characteristic
 - Framework more orientated to information needs of investors than stewardship
 - Framework does state that investors need information about manager stewardship but ignores problem that best information for investor decision making and stewardship evaluation may not be the same

Additional Questions

1. **Why may company prefer to use debt than equity to fund a project?**
 - Cost of debt < Cost of equity because adverse selection cost is lower for debt offering than equity. Firstly, nominal face value of payoffs for debts are known and therefore lower information asymmetry. 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.
 - Some lenders (bank) can be given special access to internal firm information that suggests it will perform well in the future that it can disclose to lenders (resulting in a lower cost of debt).
 - Cost of debt < Cost of equity because moral hazard cost is lower for debt offering. Debt can act as a disciplinary mechanism as the firm is committed to making regular cash payments. Firm cant perform empire building as they need future CF to repay debt.

2. **Firms are increasing delisting and being bought out by private equity firms. Use the concepts of information asymmetry to explain this.**
 - Publicly-listed firms are subject to substantial *moral hazard* problems because of the separation of control from ownership. Shareholders in publicly-listed companies cannot observe the actions of management and in-turn management may act in their own self-interest such excessive pay, only investing in projects with short-terms payoffs and

empire building. Private equity firms are more closely involved in direct oversight of company management and in turn there is less information asymmetry and a reduction of moral hazard problems and in turn an increase in value of the firm.

3. Will accrual increase/decrease information asymmetry?

- Accruals could potentially decrease information asymmetry because they increase the *relevance* of the reported performance metric by alleviating timing and matching problems associated with operating cash flows. Adverse selection is reduced because a more precise measure of economic value added is produced which can be used to value the firm. Moral hazard is reduced because a more precise measure of managerial effort is obtained.
- However, accruals could potentially increase information asymmetry as accruals have to be estimated giving rise to both random errors and biases arises from GAAP and measurement rules and they could therefore be *unreliable*.

Conclusion for Lecture 1:

- Objectives of financial reports:
 - Valuation (present value of future cash flows)
 - Stewardship (information that facilitates efficient contracting)
- Minimize of information asymmetry has important implications for economic welfare
- The desirable properties of financial reports to minimize information asymmetry may not be the same for adverse selection and moral hazard
- Two significant conventions associated with financial reporting are accrual and conservatism