Role of Financial Accounting

- Information decision usefulness (Valuation & Efficient contracting)
- Reduce information asymmetry
    - **Adverse selection**
        - Hidden information about firm's fundamental value
        - Consequence:
            - Collapse of financial market→Increase firms' cost of capital
        - Solution:
            - Reliable financial reporting
            - Auditing/Assurance
            - Financial analyst
            - Credit rating agency
            - Signalling
    - **Valuation**
        - Supplying value relevant accounting information about firm's fundamental value in a cost-effective way, so investors could distinguish good and bad firms→efficient allocation of resources
    - **Moral hazard**
        - Hidden information about manager's effort
        - Reason:
            - Debtholder
                - Assumed SH and manager's interest align, interest misalignment between SH, manager & debtholder
                - Lenders face asymmetry payoff (downside risk)
            - Shareholders
                - Managers assumed rational, risk averse (vs. SH risk neutral) and act in their own interest
                - Separation of ownership and control→managers do not bear full cost of dysfunctional behaviour OR managers do not share the benefits of ownership (share price)→interests between SH and manager are not aligned
            - Effectively impossible for creditor and shareholders to observe manager's effort
        - consequence
            - Cost of debt
                - Excessive dividend payment
                - Asset substitution (changing business plan)
                - Claim dilution
            - Cost of equity (Agency problem)
                - If earnings tie to bonus, cut off expenses (e.g. R&D) to boost earnings
                - Dividend retention
                    - Empire building (increase size/complexity, increase compensation)
                    - Excessive consumption of perquisite
                - Risk aversion→Invest in safe project only
                - ST horizon vs SH's long term investment
                - Investors fear of being ripped off→Market collapse
        - Solution:
            - Contract to indirect observe manager's effort
            - Debt contract
                - Debt covenant (Level of working capital/D/E/Times interest earned)
                    - Early warning system
                    - Incentivise manager to maintain company performance
                - Consequence for technical default
                    - Renegotiate terms→higher interest rate
                    - Immediate repayment
                    - Preventing addition firm borrowing
                    - Enforce dividend restriction

        - Operating (Boost sales from discounting stocks, cut R&D, advertising)
        - Financing (Debt early repayment to save interest expense)
        - Investing (Assets/securities sales)
- Pattern of earnings management
    - Big bath (recording large write-offs puts future earnings in the bank because of accrual reversal)
    - Income smoothing (↓ Volatility of reported earnings)
    - Income maximization/minimization)
- Motives for Earnings management
    - Contractual
        - Managerial compensation contract (bonus base on Earnings/manager is risk averse)
        - Debt contract (violation of debt covenant)
        - Change of CEO
            - Increase negative discretionary accruals for a turnaround next period
    - Regulatory
        - Political
            - Affected firms chose accounting policy to lower reported earnings→government grants tariff
    - Capital market
        - Surrounding capital transactions
            - Seasonal offering
            - IPO
            - Manager exercise their option plans/buy/sell shares
        - Surrounding earnings announcement
            - Meet/exceed forecast
                - Significant negative effect on share prices & manager's reputation if expectations are not met (prospect theory)
            - Smooth earning
                - Decrease volatility of reported earnings (Valuation)
- <u>Efficient motives for earnings management</u>
    - Valuation
        - Discretionary accruals→Signalling (persistent earnings power)→Credibly communicate inside information to investors→Help investor to evaluate fundamental value of complex firm→easier to forecast CF→reduce estimation risk, hence cost of capital
    - Efficient contracting
        - Contract is rigid
        - Managerial compensation contract
            - If manager's bonus is Healy's bonus plan
            - Unforeseen event might affect earnings→allowing Earning management could reduce volatility→reduce contracting cost and better motivate managers
        - Debt contract
            - Decrease probability of breaching debt covenant hence avoid technical default, it is costly
            - Covenant slack=actual current ratio – required current ratio
- <u>Opportunistic motives for earnings management</u>
    - Valuation
        - Distortions→Reduce earnings quality
        - Accrual anomalies→earnings are misleading
            - Investors do not see through earnings content
    - Efficient contracting
        - Managerial compensation contract
            - If manager's bonus is Healy's bonus plan
            - To maximise bonus→engage in earnings management to hide their shirking

Financial/Ratio analysis

- Measure relative performance
- Firm value determination
  - Profitability
  - Growth opportunity
- Firms' policy to achieve profit and growth
  - Operating management
    - Managing revenue and expense
  - Investment management
    - Managing working capital and fixed asset
  - Financing management
    - (capital structure) Managing liabilities and equity
  - Dividend policies
    - Managing payout
- **Limitations with Du Pont:**
  - $ROE = \frac{Net\ profit}{Sales} \times \frac{Sales}{Assets} \times (1 + \frac{Liabilities}{Equity})$
  - ROA denominator includes the assets claimed by all providers of capital (Liabilities + equity) whereas ROA numerator includes only the earnings available to equity holders→mismatch
  - Net profit includes profit from operating activities & interest income/expense
    - No differentiation by profit from operating/investing activities
    - Expect operating activities generate more profit
  - Assets include both operating & investment assets
    - No differentiation by assets/return rate
    - Expect operating assets to generate higher revenue
  - Liabilities include both interest-bearing & non-interest-bearing(operating)
    - No differentiation by risk
  - Not recognise 'negative debt' (cash & cash equivalents & marketable securities)
    - Liquid to meet debt
    - Same level of debt but less risky if firm has more 'negative debt'
  - Not recognise direct positive effect on ROE/indirect negative effect through increasing financial risk and borrowing costs
- Alternative decomposition based on reformulated financial statements
  - Derivation

Prospective analysis

- Sales growth/Future earnings (base on sales)
  - Mean reverting due to
    - Demand saturation & intra-industry competition
- ROE
  - Mean reverting, except for
    - Sustainable competitive advantage
    - Conservative accounting (understated net assets & equity)
- Comparable firm price multiple valuation (level 2 inputs)
  - Limitations:
    - Difficult to identify comparable firms due to different strategies, growth opportunities & profitability→use industry average
    - Firm with poor performance; negative price multiples are meaningless→adjust for transitory shocks & use operating earnings
    - Lack of consistency between numerator and denominator→adjustment for leverage, price/sales vs operating earnings (before deducting debt interest expense)
- **Discounted dividend model**
  - Benefits of DDM
    - Dividends are what SH gets
    - Dividends are usually stable in the SR→predictability

        - Opportunistic manager: choosing accounting policy to maximise their utility

Voluntary disclosure

- Accounting information
    - Produce by preparer; demanded by users
    - Marginal social cost = marginal social benefit
    - Benefit of decision-useful information production
        - Information hypothesis
            - Improve investors' decisions
            - Improve manager's decisions
        - Improve operation (efficiency of scarce resources allocation)
            - Capital markets
            - Managerial labour markets (indication of manager's effort)
    - Manager's private incentive for information production
        - Contractual incentives
            - Compensation contracts (performance measures need NI)
            - Debt contracts (debt covenants need D/E, working capital)
        - Market based incentives
            - Securities market (AS→increased cost of capital)
            - Managerial labor market (poor disclosure lowers manager's market value/reputation)
            - Takeover market (poor disclosure leads company being take over, manager loses job)
        - Disclosure principle
            - Market knows manager has information, poor disclosure→AS→market collapse→full disclosure
        - Signaling (prohibitively costly)
            - Grant of executive stock options/retained proportion of equity at IPO/conservative accounting/report excess positive accruals (confidence in future earnings to sustain negative accruals reversal)/high-quality GN forecast/high-quality auditor/debt financing
    - Cost of information production
        - Out-of-pocket cost (Time & effort, information system, accountant cost)
        - Proprietary cost
        - Contracting cost (Increase volatility from FV)
    - Coase theorem
        - Problem of externalities can be internalized→reducing the need for regulation, if
            - Sufficiently low transaction costs
            - Free bargaining is possible
    - Market failure in private information production→Regulation required
        - Externalities problem
            - Action taken by a one that imposes costs/benefits on other for which the entity creating the externality is not charged or does not receive revenue
        - Public good nature of information
            - A good that consumption by one person does not destroy it for use by another
        - Free-riding problem
            - Receipt by one of a benefit from an externality at little or no cost
        - Ineffective market forces
            - Adverse selection problem
                - Insider trading/information retention for the benefit of manager→information release is not credible
            - Moral hazard problem
            - marginal benefit of disclosure)