# Accounting

## Fundamental analysis

- Fundamental analysis uses financial statements and other information to do systematic business analysis.
- Fundamental analysis is the process of using financial statements and other information to conduct accounting analysis, financial analysis, forecasting and valuation.
- Objective is to evaluate company performance and prospect and, forecast future performance, and value the company
- Fundamental analysis vs Other types of 'analysis'
  - Intuitive investing
    - No analysis of economic and financial information
    - Just rely on intuition and hunches
  - Passive investing
    - No analysis of economic and financial information
    - Just accept market price as the company's value
    - Assume capital market is always efficient and shares are never mispriced
  - Fundamental investing
    - Based on analysis of economic and financial information
    - Analysis aims to identify mispriced shares
    - Analysis aims to avoid buying or selling at a price that does not reflect the value creation potential of the business
- Focuses on what firms do to generate value

## Clean surplus accounting

- $BVE_t = BVE_{t-1} + CI_t - d_t$
- $BVE_t = NOA_t - ND_t$
- $CI_t = Net\ income + OCI$
  - If comprehensive income = net income → clean surplus income
  - If comprehensive income = net income + OCI → dirty surplus income
  - Net income = revenue – expense
  - Other comprehensive income items:
    - Asset revaluation
    - Currency translation gains and losses
    - Unrealized gains and losses on securities
    - Gains and losses on derivative instruments
- $d_t = Dividends + Share\ repurcharses - Share\ issues$
  - Net transactions with shareholders

## Dirty surplus accounting

- Dirty surplus items = Other comprehensive income items
- $BVE_t \neq BVE_{t-1} + CI_t - d_t$
- Dirty surplus problem: GAAP allows some income items bypass the income statement (CI) and go directly to shareholders' equity (BVE) in the balance sheet

## Reformat financial statements

1. Raw financial statements mix the company's operating and financing activities
   - We separate operating and financing activities so we can evaluate profitability from operations separately to financing
   - We use the Advanced du pont ratios to evaluate profitability
   - Advanced du pont looks separately at the operating and financing effects on profitability
   - Healthy firms generate profits from operations not financing
2. Raw income statement does not capture income from all sources
   - Reformat the statement of changes in shareholders' equity to identity other comprehensive income items so these can be included in the income statement profit measures:
     - Comprehensive net operating income (NOPAT)
     - Comprehensive net income (CI)

## Reformat the Statement of Changes in Shareholders' Equity

| | | |
|---|---|---|
| Shareholders' Equity balance, 31 Dec, 20x0 (- preferred stock) | | x |
| Net transactions with shareholders: | | |
| Issue of common stock | x | |
| Common dividends | (x) | |
| Repurchases of common stock | (x) | x |
| Comprehensive income: | | |
| Net income | x | |
| Unrealized gain on securities | x | |
| Translation loss | x | |
| Preferred dividends | x | x |
| Shareholders' Equity balance, 31 Dec, 20x1 (- preferred stock) | | x |

## Reformat the Balance Sheet

- How to classify as financing assets and liabilities?
  - The rule is everything that bears a *market rate of interest* is a financing item

| Net Operating Assets: | 2003 |
|---|---|
| Operating assets | x |
| Less, Operating liabilities | (x) |
| NOA | x |