

	recognition time	convention	advantages	criticism
historic cost	all or a substantial portion of the service has been performed and cash receipt is reasonably certain	matching principle- expense recognise at the same time as revenue	past transactions is important in predicting future cash flows and stewardship, reliable	HC may not match current revenue with current operating costs, revenue recognition lag, no recognition in balance sheet of current assets and liabilities
current cost (entry pricing)	changes in fair value of assets or liabilities	base on current replacement cost	differentiating operating profit from holding gains and losses- information more useful	difficult to precisely estimate replacement costs
fair value (exit price)	at the point of production	use market selling price to measure the value of assets and liabilities at year end in the balance sheet	all gains are treated as part of profit, relevance, additively	firm valuation primary interest is value in use instead of value in exchange, may not be reliable, ignore transaction costs

**Efficient securities market:**

The price of securities traded on that market fully reflect all information that is available to public

Expectations are built into price

For rational risk-averse investor, investing is fair, cannot have abnormal return

The naïve investor is price protected by an efficient market

Only accounting information that affects expectations of future cash flows is priced

Full disclosure enhances efficiency

**Unexpected earnings UE** = actual earnings – expected earnings

**Earnings response coefficients ERC:**  $\beta$  measures the response of AR to UE

Abnormal return  $AR = \alpha + \beta UE + e$

Factors affecting ERC: firm characteristics, earnings persistence, earnings quality

Earnings persistence: permanent:  $ERC > 1$

affect current year only:  $ERC = 1$

price irrelevant:  $ERC = 0$

historic cost: recognize the transaction that  $ERC > 1$

fair value: recognize the transaction that  $ERC = 1$

**Fundamental valuation** use basic accounting measures or fundamentals  
 Assess the amount, timing, uncertainty of a firm's future cash flow or earnings  
 1 forecast future values of some financial attributes  
 2 determine the risk or uncertainty  
 3 determine the discounted/present value of the relevant expected future values

**Methods:**

**1 discounted dividends DD (underlying model)**

$$Equity\_value = BVE_0 + \frac{NI_1 - r_e \times BVE_0}{(1+r_e)} + \frac{NI_2 - r_e \times BVE_1}{(1+r_e)^2} + \frac{NI_3 - r_e \times BVE_2}{(1+r_e)^3} + TV$$

- Start with the book value of equity (BVE<sub>0</sub>) (1)
- Calculate the **sum** of discounted abnormal earnings over a forecast horizon (here, 3 years) [(2)+(3)+(4)]
- Calculate the terminal value (TV) (5)

Dividends are stable in short time, easy to forecast  
 Dividends is not related to value, requires forecasts for long periods

**2 discounted abnormal earnings AE**

clean surplus: positive, negative deviations offsets

**Equity Value** = PV of future dividends (including any liquidating dividend)

$$Equity\_Value = \frac{DIV_1}{(1+r_e)} + \frac{DIV_2}{(1+r_e)^2} + \frac{DIV_3}{(1+r_e)^3} + \dots$$

Assuming **constant** dividend growth rate (*g<sub>d</sub>*) indefinitely:

$$Equity\_Value = \frac{DIV_1}{(r_e - g_d)}$$

Cost of equity capital

$$Asset\_Value = BVA_0 + \frac{NOPAT_1 - WACC \times BVA_0}{(1+WACC)} + \frac{NOPAT_2 - WACC \times BVA_1}{(1+WACC)^2} + \frac{NOPAT_2 - WACC \times BVA_2}{(1+WACC)^3} + \dots$$

- BVA = book value of the firm's net (**operating**) assets
- NOPAT = net **operating** profit after tax
- WACC = weighted average cost of debt and equity capital

**3 discounted cash flow DCF**