

Dupont analysis

$$\begin{aligned} \text{RoE} \\ (\text{Return on Equity}) &= \frac{\text{net income}}{\text{equity}} = \underbrace{\frac{\text{net income}}{\text{assets}}}_{\text{RoA}} \cdot \underbrace{\frac{\text{assets}}{\text{equity}}}_{\text{leverage}} \end{aligned}$$

$$\begin{aligned} \text{RoA} \\ (\text{Return on Assets}) &= \frac{\text{net income}}{\text{assets}} = \underbrace{\frac{\text{net income}}{\text{revenue}}}_{\text{NPM}} \cdot \underbrace{\frac{\text{revenue}}{\text{assets}}}_{\text{total asset turnover}} \end{aligned}$$

$$\begin{aligned} \text{NPM} \\ (\text{net profit margin}) &= \frac{\text{net income}}{\text{revenue}} = \frac{\text{Operating Income}}{\text{revenue}} \cdot \frac{\text{IBT}}{\text{Operating Income}} \cdot \frac{\text{IBT-Tax}}{\text{IBT}} \end{aligned}$$

IBT = Income before Tax (but after interest payments)