THE DUPONT EQUATION & SGR

ROE is perfectly simple to figure out, so why does the DuPont have to make it *more* complex? Because it's made up of ratios that tell us stuff:

RETURN ON EQUITY

$$ROE = \frac{\text{Net Income}}{\text{Equity}}$$

Look at the 5 different ratios built into the DuPont equation. **Important:** Test questions will use these ratio names, and you'll have to put the values in the right places. So make sure you learn the names of all 15 ratios on the formula sheet, plus the two not on there: the **Leverage Multiplier** (A/E) and the **Dividend Payout Ratio** (Dividends/NI).

DUPONT EQUATION

$$\frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$

NI / S
NET MARGIN

PROFITABILITY

How efficiently are our operations running?

NI is what's left after all those costs are deducted from Sales Revenues

(See Income Statement Sheet)

S / A
ASSET TURNOVER

EFFICIENCY

How efficiently is the company using its assets?

This one compares sales numbers to how much it's costing us

S: Income Stmt A: Balance Sheet

A / E
LEVERAGE MULTIPLIER

LEVERAGE

Is debt making the company more profitable?

The higher the number, the bigger the % of assets paid for with debt

Also called Equity Multiplier

NI / A
RETURN ON ASSETS

What can we do with the assets we have?

Compares profit to resources, so the higher the number, the better the management is doing.

NI / E
RETURN ON EQUITY

How effective are we at using our money to make more money?

The higher the ROE, the more efficient we are at making good use of our owners' investment.

SUSTAINABLE GROWTH RATE

SGR = ROE (1 – b)

$$\frac{\text{Net Income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}} \times \left(1 - \frac{\text{Dividends}}{\text{Net Income}}\right)$$

Sustainable Growth Rate is about finding the perfect balance of increasing sales and paying regular dividends, while not messing with the company's perfect debt-to-equity ratio.

How to Decrease DFN

or, "Ways to need less money"

- Slow sales growth
- Examine capacity constraints
- Lower dividend payout
- Increase Net Margin