

FINA 301 FINANCIAL MANAGEMENT

U.S. Corporation Balance Sheets as of December 31, 2002 and 2003
(\$ in Millions)

	2002	2003		2002	2003
Current assets	\$104	\$160	Current liabilities		
Cash	455	688	Accounts Payable	\$232	\$266
Accounts receivable	553	555	Notes Payable	196	123
Inventory	\$1,112	\$1,403	Total	\$428	\$389
Total					
Fixed assets			Long-term debt	\$408	\$454
Net fixed assets	\$1,644	\$1,709	Owners' Equity		
			Common stock & paid-in surplus	600	640
			Retained earnings	1,320	1,629
			Total	\$1,920	\$2,269
Total fixed assets	\$2,756	\$3,112	Total Liabilities & Owners' equity	\$2,755	\$3,112

U.S. CORPORATION 2003 Income Statement (\$ in Millions)	
Net sales	\$1,509
Cost of goods sold	750
Depreciation	65
Earnings before interest and taxes	\$694
Interest paid	70
Taxable income	\$624
Taxes	212
Net Income	\$412
Dividends	\$103
Addition to retained earnings	309

SHORT TERM SOLVENCY LIQUIDITY RATIOS	LONG TERM SOLVENCY FINANCIAL LEVERAGE RATIOS
1. Current Ratio = $\frac{1112}{428} = 2.6$	1. Total debt ratio = $\frac{2756 - 1920}{2756} = \frac{836}{2756} = 0.3$
2. Quick Ratio = $\frac{1112 - 553}{428} = 1.3$	2. Debt Equity Ratio = $\frac{836}{1920} = 0.43$
3. Cash Ratio = $\frac{104}{428} = 0.24$	3. Equity Multiplier = $\frac{2756}{1920} = 1.43$ or, $= 1 + \frac{836}{1920} = 1 + 0.43 = 1.43$
	- Given anyone, you can calculate the other two.

DUPOND IDENTITY

$$\begin{aligned}
 \text{ROE} &= \text{PM} * \text{TAT} * \text{EM} \\
 &= \frac{\text{NI}}{\text{SALES}} * \frac{\text{SALES}}{\text{TA}} * \frac{\text{TA}}{\text{TE}} \\
 &= \frac{412}{1509} * \frac{1509}{2756} * \frac{2756}{1920} = 0.214
 \end{aligned}$$

FINA 301 FINANCIAL MANAGEMENT

SHORT TERM SOLVENCY LIQUIDITY RATIOS	LONG TERM SOLVENCY FINANCIAL LEVERAGE RATIOS	ASSET MANAGEMENT TURNOVER RATIOS	PROFITABILITY RATIOS	MARKET VALUE RATIOS
<p>1. Current Ratio = $\frac{CA}{CL}$</p> <p>2. Quick Ratio = $\frac{CA - Invent.}{CL}$</p> <p>3. Cash Ratio = $\frac{CASH}{CL}$</p>	<p>1. Total debt ratio = $\frac{TA - TE}{TA} = \frac{TD}{TA}$</p> <p>2. Debt Equity Ratio = $\frac{TD}{TE}$</p> <p>3. Equity Multiplier = $\frac{TA}{TE} = 1 + \frac{TD}{TE}$ Given anyone, you can calculate the other two.</p>	<p>1. Coverage Ratios</p> <p>- Times interest earned = $\frac{EBIT}{Interest}$</p> <p>- Cash coverage = $\frac{EBIT + Dep.}{Interest}$</p> <p>2. Inventory ratios</p> <p>Inventory turnover = $\frac{COGS}{Inventory}$</p> <p>Days' sales = $\frac{365}{Inven. Turnover}$</p> <p>3. Receivable ratios</p> <p>Receivables turnover = $\frac{Sales}{Acc. Re c.}$</p> <p>Days' sales in receivable = $\frac{365}{Rec. Turn.}$</p> <p>4. Total assets turnover = $\frac{Sales}{TA}$</p>	<p>1. Profit Margin = $\frac{NI}{Sales}$</p> <p>2. ROA = $\frac{NI}{TA}$</p> <p>3. ROE = $\frac{NI}{TE}$</p>	<p>1. PE Ratio = $\frac{Price \text{ per share}}{Earnings \text{ per share}}$</p> <p>2. Market to Book ratio = $\frac{Mkt. value \text{ per share}}{Book value \text{ per share}}$</p>
<p>DUPOND IDENTITY</p> <p>ROE = PM * TAT * EM</p> <p style="text-align: center;"> $\downarrow \qquad \qquad \downarrow \qquad \qquad \downarrow$ $= \frac{NI}{SALES} * \frac{SALES}{TA} * \frac{TA}{TE}$ </p>			<p>PAYOUT/RETENTION RATIO</p> <p>- Dividend payout ratio = $\frac{Cash Dividends}{Net Income}$</p> <p>Retention ratio = $\frac{Additions to R.E.}{Net Income}$</p>	<p>GROWTH RATES</p> <p>- Internal growth rates (IGR) = $\frac{ROA * b}{1 - ROA * b}$</p> <p>Sustainable growth rate (SGR) = $\frac{ROE * b}{1 - ROE * b}$</p>