

KEY FINANCIAL RATIOS FOR THE CFA EXAM

LIQUIDITY RATIOS		PROFITABILITY RATIOS		VALUATION RATIOS	
Current ratio	= $\frac{\text{Current assets}}{\text{Current liabilities}}$	Return on Sales		Price/earnings	= $\frac{\text{Price/share}}{\text{EPS}}$
Quick ratio	= $\frac{\$ + \text{mkt. secs.} + \text{A/R}}{\text{Current liabilities}}$	Gross (profit) margin = $\frac{\text{Gross profit}}{\text{Net sales}}$		Price/cash flow	= $\frac{\text{Price/share}}{\text{CF/share}}$
Cash ratio	= $\frac{\$ + \text{mkt. secs.}}{\text{Current liabilities}}$	Operating profit (EBIT) margin = $\frac{\text{Oper. inc. (EBIT)}}{\text{Net sales}}$		Price/sales	= $\frac{\text{Price/share}}{\text{Sales/share}}$
Defensive interval	= $\frac{\$ + \text{mkt. secs.} + \text{A/R}}{\text{Daily \$ expenditures}}$	Pretax (profit) margin = $\frac{\text{Pretax inc. (EBT)}}{\text{Net sales}}$		Price/book value	= $\frac{\text{Price/share}}{\text{BV/share}}$
Operating cycle	= DOH + DSO	Net profit margin = $\frac{\text{Net income}}{\text{Net sales}}$		PER-SHARE QUANTITIES	
Cash conversion ratio or net	= $\frac{\text{DOH} + \text{DSO}}{- \# \text{ days A/P}}$	Return on Investment		Basic EPS	= $\frac{\text{NI} - \text{pf. div.}}{\text{Wtd. ave. C/S O/S}}$
ACTIVITY RATIOS		Operating return on assets = $\frac{\text{EBIT}}{\text{Ave. TA}}$		Diluted EPS	= $\frac{\text{Diluted earnings}}{\text{Diluted C/S O/S}}$
Inventory turnover	= $\frac{\text{CGS}}{\text{Ave. inventory}}$	Return on assets (ROA) = $\frac{\text{Net income}}{\text{Ave. TA}}$		Cash flow/share	= $\frac{\text{CFO}}{\text{Ave C/S O/S}}$
Days' inventory on hand (DOH)	= $\frac{\text{Days in period}}{\text{Inventory T/O}}$	Return on total capital (ROC) = $\frac{\text{EBIT}}{\text{Debt} + \text{S/E}}$		EBITDA/share	= $\frac{\text{EBITDA}}{\text{Ave C/S O/S}}$
Receivables turnover (A/R T/O)	= $\frac{\text{Credit sales}}{\text{Ave. A/R}}$	Return on common equity (ROE) = $\frac{\text{NI} - \text{pf. div.}}{\text{Ave common eq.}}$		Dividends/share	= $\frac{\text{Com. div. declared}}{\text{Wtd. ave. C/S O/S}}$
Days' sales outstanding (DSO)	= $\frac{\text{Days in period}}{\text{A/R T/O}}$	SOLVENCY RATIOS		DIVIDEND-RELATED QUANTITIES	
Payables turnover (A/P T/O)	= $\frac{\text{Purchases}}{\text{Ave. A/P}}$	Debt-to-total assets ratio = $\frac{\text{Debt}}{\text{TA}}$		Dividend payout ratio	= $\frac{\text{Common dividends}}{\text{NI} - \text{pf. div.}}$
# days' payables	= $\frac{\text{Days in period}}{\text{A/P T/O}}$	Debt-to-total capital ratio = $\frac{\text{Debt}}{\text{Debt} + \text{S/E}}$		Earnings retention ratio (ERR)	= $\frac{\text{NI} - \text{all dividends}}{\text{NI} - \text{pf. div.}}$
Working capital T/O	= $\frac{\text{Net sales}}{\text{Ave. W/K}}$	Debt-to-equity ratio = $\frac{\text{Debt}}{\text{S/E}}$		Sustainable growth rate	= $\text{ERR} \times \text{ROE}$
Fixed asset (FA) T/O	= $\frac{\text{Net sales}}{\text{Ave. fixed assets}}$	Financial leverage ratio = $\frac{\text{Ave. TA}}{\text{Ave S/E}}$		FREE CASH FLOW (FCF)	
Total asset (TA) T/O	= $\frac{\text{Net sales}}{\text{Ave. TA}}$	Coverage Ratios		FCF to equity	FCF to the firm
		Interest coverage ratios = $\frac{\text{EBIT}}{\text{interest}}$		CFO	CFO
		Fixed charge coverage = $\frac{\text{EBIT} + \text{lease pmts.}}{\text{Int.} + \text{lease pmts.}}$		- Capital exp.	+ Int. x (1 - tax rate)

DUPONT ANALYSIS

TRADITIONAL DUPONT

$$\text{Profit margin} \times \text{Asset T/O} \times \text{Fin'l Leverage} = \text{ROE}$$

EXTENDED DUPONT

$$\text{Tax burden} \times \text{Interest burden} \times \text{EBIT margin} \times \text{Asset T/O} \times \text{Fin'l leverage} = \text{ROE}$$

$$\frac{\text{NI}}{\text{EBT}} \times \frac{\text{EBT}}{\text{EBIT}} \times \frac{\text{EBIT}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Ave TA}} \times \frac{\text{Ave TA}}{\text{Ave S/E}} = \text{ROE}$$

$$\text{ROA} \times \text{Fin'l leverage} = \text{ROE}$$

$$\frac{\text{Net income}}{\text{Ave TA}} \times \frac{\text{Ave TA}}{\text{Ave S/E}} = \text{ROE}$$

$$\text{Profit margin} \times \text{Asset T/O} = \text{ROA}$$

$$\frac{\text{Net income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Ave TA}} = \text{ROA}$$

$$\text{Tax burden} \times \text{Interest burden} \times \text{EBIT margin} = \text{Profit margin}$$

$$\frac{\text{Net income}}{\text{EBT}} \times \frac{\text{EBT}}{\text{EBIT}} \times \frac{\text{EBIT}}{\text{Sales}} = \text{Profit margin}$$