

Table 9.1Management
performance
ratios**A. Profitability ratios**

Net profit margin	=	$\frac{\text{Net profit after tax}}{\text{Sales}}$
Gross operating margin	=	$\frac{\text{Sales less Cost of sales}}{\text{Sales}}$
Net operating margin	=	$\frac{\text{Net profit before interest and tax}}{\text{Sales}}$
Return on equity (ROE)	=	$\frac{\text{Net profit after tax}}{\text{Equity}}$
Return on assets (ROA)	=	$\frac{\text{Net profit before interest}}{\text{Total assets}}$
	=	$\frac{\text{Net profit after tax} + (\text{interest} \times (1 - \text{tax rate}))}{\text{Total assets}}$
Return on capital employed (ROCE)	=	$\frac{\text{Net profit before interest on long-term debt}}{\text{Equity} + \text{long-term debt}}$
Earnings per share (EPS)	=	$\frac{\text{Net profit after tax}}{\text{Number of shares outstanding}}$

B. Asset utilization ratios

Total asset turnover	=	$\frac{\text{Sales}}{\text{Total assets}}$
Long-term asset turnover	=	$\frac{\text{Sales}}{\text{Long-term assets}}$
Inventory turnover	=	$\frac{\text{Cost of sales}}{\text{Inventories}}$
Receivables turnover	=	$\frac{(\text{Net credit}) \text{ Sales}}{\text{Receivables}}$

on investment ratio (ROI) does. Depending on what is meant by ‘investment’, different ROI ratios can be used: return on equity (ROE), return on assets (ROA) and return on capital employed (ROCE).

Return on equity (ROE) measures how much the company has earned on the funds invested by its shareholders. Funds invested by shareholders are set equal to equity and thus imply both directly invested funds and funds invested indirectly through retained profit. Obviously, the ROE ratio reflects a shareholder perspective. ROE is a slightly dangerous figure in that it is not a ‘real’ return and should not be compared with, for example, the rate of interest paid on a bank deposit account. It can be used in time series analysis to show whether profitability is improving or declining, viewed from the equity perspective, as opposed to all finance.

Return on assets (ROA) reflects how much the company has earned on the investment of all the financial resources committed to the company. In this ratio