

FINANCE III - PART FOUR - FINANCIAL RATIOS

EXERCISE

You should calculate the following financial ratios for Colruyt N.V. (a) for the year ended March 31, 2019, and (b) as of March 31, 2019 (see the attached financial statements).

(1) The ratios specified in the second attachment (which is from pages 156 and 157 of "Fundamentals of Financial Management" - the textbook for Finance I and Finance II).

Important remark: in these ratios, "debt" means "total borrowings".

(2) The following additional ratios:

Total equity to total assets ratio.

Trade payables in days.

Gross profit margin.

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Attachments: mentioned.

Consolidated income statement *COLRUYT*

(in million EUR)	Note	2018/19 ⁽¹⁾	2017/18
Revenue			
Cost of goods sold	3.	9,433.9	9,030.6
Gross profit	3.	(6,962.7)	(6,681.1)
Other operating income	3.	2,471.2	2,349.5
Services and miscellaneous goods	4.	134.9	111.5
Employee benefit expenses	5.	(530.1)	(464.4)
Depreciation, amortisation and impairment of non-current assets	6.	(1,280.4)	(1,228.8)
Other operating expenses	4.	(272.2)	(245.8)
Operating profit (EBIT)	4.	(29.7)	(33.7)
Finance income		485.4	488.3
Finance costs	7.	24.5	7.1
Net financial result	7.	(5.4)	(5.7)
Share in the result of investments accounted for using the equity method	7.	19.1	1.4
Profit before tax	12., 13.	14.7	29.4
Income tax expense		519.2	519.1
Profit for the financial year	8.	(135.3)	(144.7)
		363.9	374.4
Attributable to:			
Non-controlling interests			
Owners of the parent company		1.4	1.3
Earnings per share (EPS) – basic and diluted (in EUR)	22.	382.5	373.1
		2.78	2.60

(1) The financial year of the French companies has been extended to 31 March 2019. As a result, the financial year 2018/19 includes fifteen months of the results of the French activities (1 January 2018 – 31 March 2019).

Consolidated statement of financial position

(in million EUR)	Note	31.03.19	31.03.18
Goodwill	9.	55,4	58,1
Intangible assets	10.	151,3	123,6
Property, plant and equipment	11.	2.199,1	2.131,8
Investments accounted for using the equity method	12., 13.	254,2	261,5
Financial assets	14.	8,9	40,9
Deferred tax assets	17.	20,7	28,2
Other receivables	19.	43,9	37,5
Total non-current assets		2.733,3	2.681,6
Inventories	18.	630,7	592,5
Trade receivables	19.	534,4	496,1
Current tax assets	19.	5,0	1,1
Other receivables	19.	49,3	39,6
Financial assets	14.	31,0	29,7
Cash and cash equivalents	20.	163,2	212,1
Assets held for sale	16.	-	1,4
Total current assets		1.413,6	1.372,5
TOTAL ASSETS		4.146,9	4.054,1
Share capital		331,2	315,9
Reserves and retained earnings		1.873,2	1.720,1
Total equity attributable to owners of the parent company		2.204,4	2.036,0
Non-controlling interests		3,3	5,5
Total equity	21.	2.207,7	2.041,5
Provisions	23.	26,3	32,7
Liabilities related to employee benefits	24.	143,1	127,6
Deferred tax liabilities	17.	51,2	59,0
Interest-bearing and other liabilities	25., 26.	6,5	13,7
Total non-current liabilities		227,1	233,0
Provisions	23.	0,3	0,9
Interest-bearing liabilities	25.	41,0	128,6
Trade payables	26.	1.120,7	1.092,3
Current tax liabilities		10,6	42,1
Liabilities related to employee benefits and other liabilities	26.	539,5	515,7
Total current liabilities		1.712,1	1.779,6
Total liabilities		1.939,2	2.012,6
TOTAL EQUITY AND LIABILITIES		4.146,9	4.054,1

Summary of Key Ratios

LIQUIDITY		
CURRENT	$= \frac{\text{Current assets}}{\text{Current liabilities}}$	Measures ability to meet current debts with current assets.
ACID-TEST (QUICK)	$= \frac{\text{Current assets less inventories}}{\text{Current liabilities}}$	Measures ability to meet current debts with most-liquid (quick) current assets.
LEVERAGE		
DEBT-TO-EQUITY	$= \frac{\text{Total debt}}{\text{Shareholders' equity}}$	Indicates the extent to which debt financing is used relative to equity financing.
DEBT-TO-TOTAL-ASSETS	$= \frac{\text{Total debt}}{\text{Total assets}}$	Shows the relative extent to which the firm is using borrowed money.
COVERAGE		
INTEREST COVERAGE	$= \frac{\text{EBIT}^*}{\text{Interest expense}}$	Indicates ability to cover interest charges; tells number of times interest is earned.
ACTIVITY		
RECEIVABLE TURNOVER (RT)	$= \frac{\text{Annual net credit sales}}{\text{Receivables}^{**}}$	Measures how many times the receivables have been turned over (into cash) during the year; provides insight into quality of the receivables.
RECEIVABLE TURNOVER IN DAYS (RTD) (Average collection period)	$= \frac{365}{RT}$	Average number of days receivables are outstanding before being collected.
INVENTORY TURNOVER (IT)	$= \frac{\text{Cost of goods sold}}{\text{Inventory}^{**}}$	Measures how many times the inventory has been turned over (sold) during the year; provides insight into liquidity of inventory and tendency to overstock.
INVENTORY TURNOVER IN DAYS (ITD)	$= \frac{365}{IT}$	Average number of days the inventory is held before it is turned into accounts receivable through sales.
TOTAL ASSET TURNOVER (Capital turnover)	$= \frac{\text{Net sales}}{\text{Total assets}^{**}}$	Measures relative efficiency of total assets to generate sales.
PROFITABILITY		
NET PROFIT MARGIN	$= \frac{\text{Net profit after taxes}}{\text{Net sales}}$	Measures profitability with respect to sales generated; net income per dollar of sales.
RETURN ON INVESTMENT (ROI) (Return on assets)	$= \frac{\text{Net profit after taxes}}{\text{Total assets}^{**}}$	Measures overall effectiveness in generating profits with available assets; earning power of invested capital.
	$= \text{NET PROFIT MARGIN} \times \text{TOTAL ASSET TURNOVER}$	
	$= \frac{\text{Net profit after taxes}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Total assets}^{**}}$	
RETURN ON EQUITY (ROE)	$= \frac{\text{Net profit after taxes}}{\text{Shareholders' equity}^{**}}$	Measures earning power on shareholders' book-value investment.
	$= \frac{\text{NET PROFIT MARGIN}}{\text{MARGIN}} \times \frac{\text{TOTAL ASSET TURNOVER}}{\text{TURNOVER}} \times \frac{\text{EQUITY MULTIPLIER}}{\text{MULTIPLIER}}$	
	$= \frac{\text{Net profit after taxes}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Total assets}^{**}} \times \frac{\text{Total assets}^{**}}{\text{Shareholders' equity}^{**}}$	

*Earnings before interest and taxes.

**An average, rather than an ending, balance may be needed.