# CashFlows.docx Measuring cash flows from statements

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## Part CF Cash flow estimation

### CF4 Find cash surplus in simplistic setting

Find below the Company’s balance sheet at year-end 2525.

*Balance Sheet, 12/31/2525*

Cash $525 $995 Current liabilities

Other current assets $660 $690 Debt

PP&E $2,100 $1,600 Stockholders equity

$3,285 $3,285 Total

and also for year-end 2526.

*Balance Sheet, 12/31/2526*

Cash $750 $1,070 Current liabilities

Other current assets $810 $890 Debt

PP&E $2,500 $2,100 Stockholders equity

$4,060 $4,060 Total

How much is the cash surplus?

{ANSWER: E ; xlADDRESS: FA1!$B$971 }

/\a. $195 b. $300 c. $170 d. $260 e. $225

*CF1 for eExam.rtf*

*Total Assets 12/31/2525*

= $345 Cash

+ $3,200 PP&E

= $3,545

*Total Liabilities & Equity 12/31/2525*

= $1,045 Debt

+ $2,500 Stockholders equity

= $3,545

*Multiple setup (CF1m)*

Find below the Company’s balance sheet at year-end 2525.

*Balance Sheet, 12/31/2525*

Cash $345 $1,045 Debt

PP&E $3,200 $2,500 Stockholders equity

$3,545 $3,545 Total

For the year 2526, the following items are forecast: Depreciation is $350 ; Capital Expenditures equal $290 ; Interest expense is $110 ; Net Income is $460 ; Dividends equal $221 ; Cash Flow from Assets is $523 ; Net Debt Issues is ($42) (that is, debt decreases). There is no preferred stock or extraordinary items, and there are no other non-cash expenses. The balance sheet for year-end 2526 contains only the same line items as appear above.

{xlADDRESS: FA1!R78C1 ; CLUES: Net equity issues2526 = ($150)}

### CF1am Find cash surplus given 1 balance sheet, some flows, and cash flow from assets

For year 2526, how much is the cash surplus?

{ANSWER: B ; xlADDRESS: FA1!$B$98 }

/\a. $88 b. $107 c. $97 d. $80 e. $118

### CF1bm Find cash flow to shareholders given 1 balance sheet, some flows, and cash flow from assets

For year 2526, how much is the cash flow to shareholders?

{ANSWER: A ; xlADDRESS: FA1!$F$98 }

/\a. $371 b. $307 c. $253 d. $279 e. $337

### CF1cm Find next year’s SE given 1 balance sheet, some flows, and cash flow from assets

For year-end 2526, how much is Stockholders Equity?

{ANSWER: A ; xlADDRESS: FA1!$J$98 }

/\a. $2,589 b. $3,446 c. $2,354 d. $2,848 e. $3,133

### CF1d Find OR(cash surplus, cash flow to shareholders, SE) given 1 balance, some flows, and cash flow from assets

Find below the Company’s balance sheet at year-end 2525.

*Balance Sheet, 12/31/2525*

Cash $345 $1,045 Debt

PP&E $3,200 $2,500 Stockholders equity

$3,545 $3,545 Total

For the year 2526, the following items are forecast: Depreciation is $350 ; Capital Expenditures equal $290 ; Interest expense is $110 ; Net Income is $460 ; Dividends equal $221 ; Cash Flow from Assets is $523 ; Net Debt Issues is ($42) (that is, debt decreases). There is no preferred stock or extraordinary items, and there are no other non-cash expenses. The balance sheet for year-end 2526 contains only the same line items as appear above. For year 2526, how much is Stockholders Equity?

{ANSWER: E ; xlADDRESS: FA1!$B$106 Net equity issues2526 = ($150)}

/\a. $2,140 b. $2,354 c. $1,945 d. $2,848 e. $2,589

### CF1e Find Net equity issues given 1 balance sheet, some flows, and cash surplus

Find below the Company’s balance sheet at year-end 2525.

*Balance Sheet, 12/31/2525*

Cash $345 $1,045 Debt

PP&E $3,200 $2,500 Stockholders equity

$3,545 $3,545 Total

For the year 2526, the following items are forecast: Depreciation is $350 ; Capital Expenditures equal $290 ; Interest expense is $110 ; Net Income is $460 ; ividends equal $221 ; Cash Flow from Assets is $523 ; Net Debt Issues is ($42) (that is, debt decreases). There is no preferred stock or extraordinary items, and there are no other non-cash expenses. The balance sheet for year-end 2526 contains only the same line items as appear above. For year 2526, how much is Net equity issues?

{ANSWER: D ; xlADDRESS: FA1!$F$106 Net equity issues2526 = ($150)}

/\a. ($124) b. ($136) c. ($102) d. ($150) e. ($113)

### CF1f Find cash surplus given 1 balance sheet, some flows, and net equity issues

Find below the Company’s balance sheet at year-end 2525.

*Balance Sheet, 12/31/2525*

Cash $345 $1,045 Debt

PP&E $3,200 $2,500 Stockholders equity

$3,545 $3,545 Total

For the year 2526, the following items are forecast: Depreciation is $350 ; Capital Expenditures equal $290 ; Interest expense is $110 ; Net Income is $460 ; Dividends equal $221 ; Cash Flow from Assets is $523 ; Net Debt Issues is ($42) (that is, debt decreases). There is no preferred stock or extraordinary items, and there are no other non-cash expenses. The balance sheet for year-end 2526 contains only the same line items as appear above. For year 2526, how much is the cash surplus?

{ANSWER: E ; xlADDRESS: FA1!$J$106 }

/\a. $80 b. $118 c. $88 d. $97 e. $107

*CF2 for eExam.rtf*

*Total assets 12/31/2525*

= $480 Cash

+ $1,900 PP&E

= $2,380

*Total Liabilities & Equity 12/31/2525*

= $480 Debt

+ $1,900 Stockholders equity

= $2,380

### CF2 find cash flow to shareholders given 1 balance sheet and some flows (set-ups for CF1 and CF2 are identical but independent)

Find below the Company’s balance sheet at year-end 2525.

|  |  |  |  |
| --- | --- | --- | --- |
| *Balance Sheet, 12/31/2525* | | | |
| Cash | $480 | $480 | Debt |
| PP&E | $1,900 | $1,900 | Stockholders equity |
|  | $2,380 | $2,380 | Total liabilities & equity |

For the year 2526, the following items are forecast: Depreciation is $170 ; Capital Expenditures equal $200 ; Interest expense is $40 ; Net Income is $210 ; Dividends equal $86 ; Cash Flow from Assets is $183 ; Net Debt Issues is $38 (that is, debt increases). There is no preferred stock or extraordinary items, and there are no other non-cash expenses. The balance sheet for year-end 2526 contains only the same line items as appear above. For year 2526, how much is the cash flow to shareholders?

{ANSWER: B ; xlADDRESS: FA1!$B$133 CLUES: Net equity issues2526 = ($95)}

/\a. $150 b. $181 c. $165 d. $199 e. $219

*CF3 for eExam.rtf*

*Total Assets 12/31/2525*

= $510 Cash

+ $750 Inventory

+ $3,400 PP&E

= $4,660

*Liabilities & Equity 12/31/2525*

= $1,410 Current liabilities

+ $750 Debt

+ $2,500 Stockholders equity

= $4,660 Total

### CF3a Find price-to-operating cash flow ratio given income statement ratios

Find below the Company’s balance sheet for year-end 2525.

*Balance Sheet, 12/31/2525*

Cash $510 $1,410 Current liabilities

Inventory $750 $750 Debt

PP&E $3,400 $2,500 Stockholders equity

$4,660 $4,660 Total

For 2525 the Company’s asset turnover ratio (*Sales2525 ÷ Total assets2525*) is 3.4. Depreciation equals 17% of PP&E, and the gross profit margin (= Earnings Before Interest and Taxes ÷ *Sales*) is 9.10%. Interest expense equals 12.00% of Long Term Debt. Taxes equal 33% of taxable income, and the payout ratio (= *Dividends ÷ Net income*) is 65%. There are no other items on the income statement for 2525. There are 130 shares outstanding.

As a prospective investor in the Company’s shares, you are especially interested in their financial ratios. You know the price-to-earnings ratio at year-end 2525 equals 12.2. More significant to you, however, is the price-to-cash-flow ratio (= shareprice ÷ operating cash flow per share). What is the company’s price-to-cash-flow ratio?

{ANSWER: D ; xlADDRESS: FA1!$B$161 CLUES: Net Income2526 = $906 ; oper. CF = $1,574 ; Price = $85.00 }

/\a. 5.8 b. 6.4 c. 4.8 d. 7.0 e. 5.3

### CF3b find operating cash flow given one balance sheet and income ratios

Find below the Company’s balance sheet for year-end 2525.

*Balance Sheet, 12/31/2525*

Cash $510 $1,410 Current liabilities

Inventory $750 $750 Debt

PP&E $3,400 $2,500 Stockholders equity

$4,660 $4,660 Total

For 2525 the Company’s asset turnover ratio (*Sales2525 ÷ Total assets2525*) is 3.4. Depreciation equals 17% of PP&E, and the gross profit margin (= earnings before interest and taxes ÷ sales) is 9.10%. Interest expense equals 12.00% of Long Term Debt. Taxes equal 33% of taxable income, and the payout ratio (=dividends÷net income) is 65%. There are no other items on the income statement for 2525. There are 130 shares outstanding.

As a prospective investor in the Company’s shares, you are especially interested in their ability to generate cash flow. How much is their operating cash flow for year 2525?

{ANSWER: A ; xlADDRESS: FA1!$B$169 CLUES: Net Income2526 = $906 ; oper. CF = $1,574 ; Price = $85.00 }

/\a. $1,574 b. $1,731 c. $1,431 d. $1,904 e. $2,095

### CF3c find operating cash flow & valuation inference given one balance sheet and income ratios

Find below the Company’s balance sheet for year-end 2525.

*Balance Sheet, 12/31/2525*

Cash $510 $1,410 Current liabilities

Inventory $750 $750 Debt

PP&E $3,400 $2,500 Stockholders equity

$4,660 $4,660 Total

For 2525 the Company’s asset turnover ratio (*Sales2525 ÷ Total assets2525*) is 3.4. Depreciation equals 17% of PP&E, and the gross profit margin (= earnings before interest and taxes ÷ Sales) is 9.10%. Interest expense equals 12.00% of Long Term Debt. Taxes equal 33% of taxable income, and the payout ratio (= *Dividends ÷ Net income*) is 65%. There are no other items on the income statement for 2525. There are 130 shares outstanding.

As a prospective investor in the Company’s shares, you are especially interested in their ability to generate cash flow. You know the price-to-earnings ratio at year-end 2525 equals 12.2. You also know that the average ratio of price-to-operating cash flow for this company’s peer group is 5.1. What is this company’s price-to-operating cash flow ratio, and does it make the company’s stock look cheap or expensive?

{ANSWER: A ; xlADDRESS: FA1!$F$169 }

/\a. the price-to-operating cash flow ratio is 7.0 and a dollar of the company's cash flow is relatively expensive in the sharemarket

/\b. the price-to-operating cash flow ratio is 8.1 and a dollar of the company's cash flow is relatively cheap in the sharemarket

/\c. the price-to-operating cash flow ratio is 6.1 and a dollar of the company's cash flow is relatively expensive in the sharemarket

/\d. the price-to-operating cash flow ratio is 8.1 and a dollar of the company's cash flow is relatively expensive in the sharemarket

/\e. the price-to-operating cash flow ratio is 7.0 and a dollar of the company's cash flow is relatively cheap in the sharemarket

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