



LEVEL 1: FINANCIAL REPORTING & ANALYSIS

Reading 19 (5th out of 12): CASH FLOW STATEMENT

Difficulty:

medium

Benchmark Study Time:

3.67h

2022



**THIS E-BOOK:**

- ❖ is a selective summary of the corresponding Reading in your CFA® Program Curriculum,
- ❖ provides place for your own notes,
- ❖ helps you structure your study and revision time!

How to use this e-book to maximize your knowledge retention:

1. **Print** the e-book in duplex and bind it to keep all important info for this Reading **in one place**.
2. **Read** this e-book, best twice, to grasp the idea of what this Reading is about.
3. **Study** the Reading from your curriculum. **Here add** your notes, examples, formulas, definitions, etc.
4. **Review** the Reading using this e-book, e.g. write your summary of key concepts or revise the formulas at the end of this e-book (if applicable).
5. **Done?** Go to [your study plan](#) and change the Reading's status to **green** :
(it will make your Chance-to-Pass-Score™ grow ☺).
6. **Come back** to this e-book from time to time to **regularly review for knowledge retention!**

NOTE: While studying or reviewing this Reading, you can use the tables at the end of this e-book and mark your study/review sessions to hold yourself accountable.



INTRODUCTION

Cash flows are divided into cash flows from:

- ▶ operating activities,
- ▶ investing activities,
- ▶ financial activities.

Role of the statement of cash flows

The role of the statement of cash flows is to determine the sources of money and exact amounts that come from every category of activities.

Liquidity & Solvency & Financial flexibility

Based on the cash flow statement, analysts are able to assess the company's:

- ▶ liquidity,
- ▶ solvency,
- ▶ financial flexibility.

liquidity = the company's ability to meet short-term obligations

solvency = the company's ability to meet long-term obligations

financial flexibility = the company's ability to exploit the opportunities arising for the company and the ability to react on financial adversities

Types of activities

Cash flows from **operating activities** are:

- ▶ the cash flows not included in investing or financing activities,
- ▶ related to everyday business operations.

Cash flows from **investing activities** are cash flows from operations related to the acquisition or disposal of long-term assets.

Cash flows from **financing activities** are cash flows from the activities related to the acquisition or repayment of capital used to finance the company's operations.



HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.



DIRECT METHOD VS. INDIRECT METHOD

Methods of preparing the cash flow statement from **operating activities**:

- direct method,
- indirect method.

The direct method consists in listing all inflows and outflows of cash and summing them up.

The indirect method assumes starting with net income and adjusting it:

- by all relevant flows that are either included (if they were not present in net income), or removed (if they were noncash items),
- for changes in working capital items, such as receivables, inventories or accounts payable.

IFRS and U.S.GAAP, allow both methods but they also encourage companies to apply the direct method.

Most of companies use indirect method.

Advantages of the indirect method:

- shows how the cash flow from operations is derived from net income,
- it is coherent with a common approach to company analysis (first estimate income → then cash flows).

Advantages of the direct method:

- gives specific information about the sources of cash inflows and outflows,
- doesn't use netting.



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PREPARING THE CASH FLOW STATEMENT

The algorithm for preparing the cash flow statement:

1. Compute the operating cash flow. Remember to take into account not only income statement and noncash expenses and revenues but also changes in assets and liabilities like receivables, inventory, payables and so on. (direct or indirect method)
2. Compute investing and financing cash flows. (direct method only)
3. Compute the cash balance at the end of the period using the amounts from points 1 and 2 and the cash balance at the beginning of the period.

Computing the operating cash flow (CFO): indirect method

<u>decrease</u> in inventory	add to net income
<u>decrease</u> in receivables	add to net income
<u>decrease</u> in prepaid expenses	add to net income
<u>increase</u> in payables	add to net income
<u>increase</u> in accrued liabilities	add to net income
<u>increase</u> in deferred tax liability	add to net income
depreciation / amortization / depletion	add to net income
amortization of <u>bond discount</u>	add to net income
amortization of <u>bond premium</u>	subtract from net income
<u>loss</u> on sale of assets	add to net income
<u>write-down</u> of assets	add to net income

HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.



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IFRS VS. U.S. GAAP

ITEM	IFRS	U.S. GAAP
interest received	operating or investing activities	operating activities
interest paid	operating or financing activities	operating activities
dividends received	operating or investing activities	operating activities
dividends paid	operating or financing activities	financing activities
taxes paid	mainly operating activities, but a portion of tax expense can be allocated to investing or financing activities if it can be directly assigned	operating activities

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FREE CASH FLOW

Free Cash Flow to the Firm (**FCFF**) is a cash flow available to the company's suppliers of capital (both debt and equity).

$$\text{FCFF} = \text{NI} + \text{NCC} + \text{I} \times (1 - t) - \text{FCInv} - \text{WCInv} = \text{CFO} + \text{I} \times (1 - t) - \text{FCInv}$$

Where:

- NI – net income,
- NCC – noncash charges,
- I – interest expense,
- t – tax rate,
- FCInv – capital expenditures,
- WCInv – working capital expenditures,
- CFO – cash flow from operations.

Free Cash Flow to Equity (**FCFE**) is a cash flow available to the company's common shareholders.

$$\text{FCFE} = \text{NI} + \text{NCC} - \text{FCInv} - \text{WCInv} + \text{NB} = \text{CFO} - \text{FCInv} + \text{NB}$$

Where:

- NI – net income,
- NCC – noncash charges,
- FCInv – capital expenditures,
- WCInv – working capital expenditures,
- NB – net borrowing,
- CFO – cash flow from operations.



HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.



CASH FLOW RATIOS

Performance ratios

$$\text{cash flow to revenue} = \frac{\text{CFO}}{\text{net revenue}}$$

$$\text{cash return on assets} = \frac{\text{CFO}}{\text{average total assets}}$$

$$\text{cash return on equity} = \frac{\text{CFO}}{\text{average shareholder's equity}}$$

$$\text{cash to income} = \frac{\text{CFO}}{\text{operating income}}$$

$$\text{cash flow per share} = \frac{\text{CFO} - \text{preferred dividends}}{\text{number of common shares outstanding}}$$

Coverage ratios

$$\text{debt coverage} = \frac{\text{CFO}}{\text{total debt}}$$

$$\text{interest coverage} = \frac{\text{CFO} + \text{interest paid} + \text{taxes paid}}{\text{interest paid}}$$

$$\text{reinvestment coverage} = \frac{\text{CFO}}{(\text{cash paid for long-term assets})}$$

$$\text{investing and financing coverage} = \frac{\text{CFO}}{\text{cash outflows for investing and financing activities}}$$



HERE KNOWLEDGE RETENTION HAPPENS | WRITE: notes, examples, formulas, definitions, relations, etc.



Summarizing key concepts:

- ☐ Cash flows from operating activities, investing activities, financial activities

My summary:

- ☐ Direct method vs. Indirect method

My summary:

- ☐ Preparing the cash flow statement

My summary:



☐ IFRS vs. U.S. GAAP

My summary:

☐ Free cash flow: FCFE, FCFF

My summary:

☐ Cash flow ratios

My summary:



Reviewing formulas:

$$\text{FCFF} = \text{NI} + \text{NCC} + \text{I} \times (1 - t) - \text{FCInv} - \text{WCInv} = \text{CFO} + \text{I} \times (1 - t) - \text{FCInv}$$

Write down the formula:

$$\text{FCFE} = \text{NI} + \text{NCC} - \text{FCInv} - \text{WCInv} + \text{NB} = \text{CFO} - \text{FCInv} + \text{NB}$$

Write down the formula:

$$\text{cash flow to revenue} = \frac{\text{CFO}}{\text{net revenue}}$$

Write down the formula:

$$\text{cash return on assets} = \frac{\text{CFO}}{\text{average total assets}}$$

Write down the formula:



$$\text{cash return on equity} = \frac{\text{CFO}}{\text{average shareholder's equity}}$$

Write down the formula:

$$\text{cash to income} = \frac{\text{CFO}}{\text{operating income}}$$

Write down the formula:

$$\text{cash flow per share} = \frac{\text{CFO} - \text{preferred dividends}}{\text{number of common shares outstanding}}$$

Write down the formula:

$$\text{debt coverage} = \frac{\text{CFO}}{\text{total debt}}$$

Write down the formula:



$$\text{interest coverage} = \frac{\text{CFO} + \text{interest paid} + \text{taxes paid}}{\text{interest paid}}$$

Write down the formula:

$$\text{reinvestment coverage} = \frac{\text{CFO}}{(\text{cash paid for long - term assets})}$$

Write down the formula:

$$\text{investing and financing coverage} = \frac{\text{CFO}}{\text{cash outflows for investing and financing activities}}$$

Write down the formula:



Keeping myself accountable:

TABLE 1 | STUDY

When you sit down to study, you may want to **try the Pomodoro Technique** to handle your study sessions: study for 25 minutes, then take a 5-minute break. Repeat this 25+5 study-break sequence all throughout your daily study session.



Tick off as you proceed.

POMODORO TIMETABLE: study-break sequences (25' + 5')													
date		date		date		date		date		date		date	
25'		25'		25'		25'		25'		25'		25'	
5'		5'		5'		5'		5'		5'		5'	
25'		25'		25'		25'		25'		25'		25'	
5'		5'		5'		5'		5'		5'		5'	
25'		25'		25'		25'		25'		25'		25'	
5'		5'		5'		5'		5'		5'		5'	
25'		25'		25'		25'		25'		25'		25'	
5'		5'		5'		5'		5'		5'		5'	

TABLE 2 | REVIEW

Never ever neglect revision! Though it's not the most popular thing among CFA candidates, regular revision is what makes the difference. If you want to pass your exam, **schedule & do your review sessions**.

REVIEW TIMETABLE: When did I review this Reading?													
date		date		date		date		date		date		date	
date		date		date		date		date		date		date	