

FA Module 6: Articulation of income statement, balance sheet, and cash flow statement (overview 4<sup>th</sup> edition)

(The attached PDF file has better formatting.)

(Readings from the fourth 4<sup>th</sup> edition of the Robinson text.)

Readings: chapter 5

- ! § 3: the cash flow statement: linkages and preparation (review)
- ! § 4: cash flow statement preparation, *excluding*
  - " section 4.2 (common-size analysis of the statement of cash flows)

The final exam tests the articulation of the financial statements several ways. The most complete problems are the indirect method of forming the cash flow statement. Know well the articulation for

- ! net revenue, accounts receivable, cash from consumers, receivables turnover
- ! cost of goods sold, inventory, purchases from suppliers, and inventory turnover
- ! purchases from suppliers, accounts payable, cash paid to suppliers, and payables turnover

Similar relations hold for wage expense, interest expense, tax expense, and other operating expenses. Wages and interest are usually paid when due, so the articulation is smaller; taxes are complex and are treated in a separate chapter.

Some problems combine several entries. The gain or loss on sale of fixed assets combine the change of the gross values of fixed assets and of accumulated depreciation on the balance sheet, the depreciation expense and the gain or loss on sale from the income statement, and the investing cash flows.

Know whether to add or subtract the change in the balance sheet asset or liability of the income statement revenue or expense. The practice problems on the discussion forum explain the rules, and the textbook has examples for each entry. Adding a change instead of subtracting it (or vice versa) is a common cause of final exam errors. The articulation rules apply to all modules, especially for foreign currency translation, deferred tax assets and liabilities, and insurance contracts.

Know Example 3, Example 4, Example 5, cash paid for interest, cash paid for income taxes, Example 6, Exhibit 8, Exhibit 9, Example 7. Each of these may be tested on the final exam; they are the same concept, with different items.

Understand the concepts in Exhibit 1 Cash Flow Statements: Differences between IFRS and US GAAP; you will not be tested on the details.

Know how to use the indirect method in Exhibit 2 Unilever Group Consolidated Cash Flow Statement and in Exhibit 5 Walmart Cash Flow Statements; the final exam asks similar problems. The exhibit adjusts the income statement (operating income) for non-cash revenue and expenses. For instance, depreciation is a non-cash expense that is deducted from operating income, so it is added back to operating income to get cash flows from operating activities.

Know how to use the indirect method in Exhibit 3 Telefónica Group Consolidated Statement of Cash Flows and in Exhibit 4 Tech Data Corporation and Subsidiaries Consolidated Cash Flow Statements.

3.1. Linkages of the Cash Flow Statement with the Income Statement and Balance Sheet says "Knowing any three of these four items makes it easy to compute the fourth." The final exam has problems giving three of the four items (for various accounting entries) and asking you to compute the fourth.

Exhibit 11 Conversion from the Indirect to the Direct Method gives a three step process, which summarizes the procedures in this module.

The final exam problems are like the end of chapter problems 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23. The logic is straight-forward, but the sign of the computation (addition vs subtraction) depends on assets vs liabilities and on income vs expense. The practice problems on the discussion forum give you extensive guidance for the final exam problems. Review the textbook examples and exhibits in Module 5, but work the end of chapter problems and practice problems after module 6. About ten points on the final exam relate to articulation of the financial statements.

GAAP has similar relations for insurance premiums and claims:

- !  $\text{incurred losses} = \text{paid losses} + (\text{claim reserves})$
- !  $\text{earned premium} = \text{written premium} - (\text{premium reserves})$

Understand the general format of this formula:

- !  $\text{income statement debit} = \text{cash outflow} - (\text{assets}) + (\text{liabilities})$
- !  $\text{income statement credit} = \text{cash inflow} + (\text{assets}) - (\text{liabilities})$

IFRS 17 includes both cash inflows (premiums) and cash outflows (claims) in the fulfilment cash flows.

The final exam also tests free cash flow to the firm (both debt and equity) and free cash flow to equity. Be sure you understand when to use the tax adjustment.

Attached to this posting are two sections from an introductory financial accounting on-line textbook:

- ! 17.2 Cash Flows from Operating Activities: The Direct Method
- ! 17.3 Cash Flows from Operating Activities: The Indirect Method

The complete textbook is at <http://open.lib.umn.edu/financialaccounting/>

Working through the cash flow illustration in the attachments helps you master the concepts.

The income statement is based on accrual accounting and the cash flow statement is based on transfers of cash. The two financial statements must be consistent (must articulate), as this module explains.

