

FA Module 7: Financial analysis techniques (overview 4th edition)

(The attached PDF file has better formatting.)

(Readings from the fourth 4th edition of the Robinson text.)

Reading: chapter 6 Financial analysis techniques

- ! § 4 common ratios used in financial analysis, *excluding*
 - " Example 10 (Bounds and context of financial measures)
 - " Example 13 (A variety of ratios)
 - " Example 14 (A comparison two companies - 1)
 - " Example 15 (A comparison two companies - 2)
- ! § 6 credit analysis, *excluding*
 - " sub-section 6.2 (research on ratios in credit analysis)

[§§2, 3, 7, and 8 are not on the syllabus for this course. §5 is covered in the next module.]

Final exam problems for many modules test financial ratios. Some problems give a financial ratio and ask for the accounting entry. A problem may give the receivables turnover and the net revenue and ask for the change in the accounts receivable.

Know the activity ratios, liquidity ratios, solvency ratios, profitability ratios, and valuation ratios. The textbook has exhibits showing the numerator and denominator for each ratio. These ratios are computed throughout the rest of the textbook. When you encounter a financial ratio in a later module, come back to this module to review how the financial ratio is formed and used.

Know Exhibit 10 Definitions of Commonly Used Activity Ratios; final exam problems ask you to compute these ratios from accounting entries, as in Example 6 Computation of Activity Ratios. A similar problem might ask about payables.

Know Exhibit 12 Definitions of Commonly Used Liquidity Ratios; all five ratios are tested on the final exam.

Know Exhibit 14 Definitions of Commonly Used Solvency Ratios, as in Example 11 Evaluation of Solvency Ratios. Note Solution 1.A: unless otherwise specified, the financial leverage ratio uses average total assets and average total equity; Dupont analysis always uses average total assets and average total equity. The final exam will test especially financial leverage ratios, interest coverage ratios, and fixed charge coverage ratios.

The final exam will not give figures that you can work out. A final exam problem like Example 11 Evaluation of Solvency Ratios would leave out either total assets or total equity, since you can derive one from the other (since total liabilities are given).

Know Exhibit 15 Definitions of Commonly Used Profitability Ratios, as in Example 12 Evaluation of Profitability Ratios. Unless otherwise specified, final exam problems use the standard definition of ROA (net income / average total assets).

Section 4.6.2 (DuPont Analysis: the decomposition of ROE) is often tested on the final exam. Focus on the five-way decomposition, and be able to derive each of the five parts from the others. Know Exhibit 17 DuPont Analysis of Anson Industries' ROE: Fiscal Year 5; Example 16 Five-Way Decomposition of ROE; and the five-way decomposition of the net profit margin in Equation 1c. Final exam problems may give ROE, ROA, tax rates, interest coverage ratios, and ask you to compute various components of Equation 1c. The practice exam problems on the discussion forum show what you can expect.

In general, ratios using balance sheet entries only use figures at the balance sheet date, and ratios combining balance sheet entries with income statement entries use averages.

- ! The debt-to-equity ratio uses year-end balance sheet entries. The final exam problem may say “the debt-to-equity ratio for December 31, 20X2.”
- ! The return on equity uses net income for the year divided by the average of beginning and end of the year shareholders’ equity. The final exam problem may say “the return on equity for 20X2.”

Know Exhibit 18 Definitions of Selected Valuation Ratios and Related Quantities.

The final exam will not test Exhibit 19 Definitions of Some Common Industry- and Task-Specific Ratios. Some items (eg, coefficient of variation) are covered in the statistics courses. Other items are industry specific and do not apply to insurers.

The CFA textbook has many sections on interpretation (financial analysis) of ratios, such as trend analysis, regression analysis, and common size analysis. Actuarial candidates learn statistical analysis on other exams. The final exam tests whether you can derive the financial ratio, not how you interpret the ratio.

Take heed: You will not be tested on the bounds, trends, or implications discussed in examples 10, 13, 14, and 15, but you will be tested on the computation of all the ratios.

Almost all insurers (and banks) have financial strength credit ratings. Section 6, credit analysis, discusses the credit rating process and the economic structure of the credit rating industry.