

Syllabus

Financial Statement Analysis (The Credit Learning Center)

Purpose and Learning Objectives - This is an introductory course in financial (accounting) statements and their analysis. It reviews the basic financial statements, quality issues in using these statements, and the analysis of these statements for the purposes of making credit decisions.

Text - Lyn M. Fraser and Aileen Ormiston, *Understanding Financial Statements*, 9th Edition, Prentice-Hall Publishing Company, 2010.

Format - This is an on-line self-paced course. You will study the text and view the lectures, which are composed of power point slides and an audio track. The lectures explain and expand on the material in the text and explain it's relevance to trade credit-granting decisions. Lectures are by Dr. Frederick C. Scherr, Professor of Finance (Emeritus), West Virginia University.

Modules:

Module Number	Assignments
1	<ol style="list-style-type: none">1. Read Chapter 1 of text.2. View Module 1 Lecture.3. Review Chapter 1.4. Take Module 1 Test. You will not need a calculator to take this test.
2	<ol style="list-style-type: none">1. Read Chapter 2 of text. Review problems 2.11, 2.14 part a, 2.19.2. View Module Lecture 2. The second part of the presentation will be a discussion of the problem solutions. You should allow time to pause the presentation to work on the problems before continuing with the solution presentation portion of the module. Do problems 2.11, 2.14 part a, 2.19.3. Review Chapter 2.4. Take Module 2 Test. You will need a calculator to take this test.

3

1. Read Chapter 3. Review problem 3.12. Assume that the following are components of "Other Income (Expense)": Gain on Sale of Equipment; Interest income; Equity Losses; Interest Expense. Note that the entries given in the problem are in random order.
2. View Module 3 Lecture. The second part of the presentation will be a discussion of the problem solutions. You should allow time to pause the presentation to work on the problem before continuing with the solution presentation portion of the module. Do problem 3.12. Compute Gross Profit, EBITDA, EBIT and EBT in dollars. Give each of these and Net Income as a percent of sales. Assuming that the firm pays \$100,000 in cash dividends and that there are no other transactions on the three equity accounts, compute the additions to retained earnings.
3. Review Chapter 3 of text.
4. Take Module 3 Test. You will need a calculator to take this test.

4

1. Read Chapter 4. Review problem 4.9 part b. Assume that the change in interest payable is part of cash flow from operations rather than from financing.
2. View Module 4 Lecture. The second part of the presentation will be a discussion of the problem solutions. You should allow time to pause the presentation to work on the problem before continuing with the solution presentation portion of the module. Do problem 4.9 part b. Again, assume that the change in interest payable is part of cash flow from operations rather than from financing. Give subtotals for cash flows from operations, investment, and financing. The firm issued \$400 in stock during the year, which is reflected in the changes in the capital stock and paid-in capital accounts. It also paid \$200 in dividends.
3. Review Chapter 4 of text.
4. Take Module 4 Test. You will need a calculator to take this test.

- 5
 1. Read Chapter 5.
 2. View Module 5 Lecture.
 3. Review Chapter 5 of text.
 4. Take Module 5 Test. You will not need a calculator to take this test.

- 6
 1. Read Chapter 6. Review Razzle-Dazzle Electronics Case (included in syllabus).
 2. View Module 6 Lecture. The second part of the presentation will be a discussion of the problem solutions. You should allow time to pause the presentation to work on the problem before continuing with the solution presentation portion of the module. Do Razzle-Dazzle Electronics case.
 3. Review Chapter 6 of text.
 4. Take Module 6 Test. You will not need a calculator to take this test.

Assessment - You must take and pass the six tests, one per module. Testing is online on NACM's Credit Learning Center accompanying these modules. Questions may be multiple choice or true/false. Questions may be taken from the assigned reading, the lecture, or the problem assignment for that module. There are 10 questions on each test and you must get 7 correct. You can take each test twice.

Credit - This course meets one of the course requirements for the NACM's CBA designation. It is also worth 3 CEUs.

Cash Flow Example for Module 4

ABC Corp.
Income Statement 2010

Net Sales	\$45,000
Cost of Goods Sold	\$30,000

Gross Profit	\$15,000
General and Admin. Exp.	\$5,000
Depreciation	\$2,000

EBIT (Operating Profit)	\$8,000
Interest Expense	\$4,000

EBT	\$4,000
Taxes	\$1,500

Net Income	\$2,500
Cash Dividends	\$1,000

Change in Retained Earnings	\$1,500

ABC Corp.		
Balance Sheets	12/31/2011	12/31/2010
Cash	\$1,200	\$2,000
Accounts Receivable	\$6,000	\$4,500
Inventory	\$8,000	\$9,000
	-----	-----
Total Current Assets	\$15,200	\$15,500
Gross Prop., Plant, and Eq.	\$36,000	\$32,000
Less: Accumulated Depreciation	(\$17,500)	(\$16,000)
	-----	-----
Net Prop., Plant, and Eq.	\$18,500	\$16,000
Total Assets	\$33,700	\$31,500
Accounts Payable	\$3,500	\$3,000
Current Long-Term Debt	\$1,500	\$2,000
	-----	-----
Total Current Liabilities	\$5,000	\$5,000
Long-Term Debt	\$14,700	\$14,000
Common Stock and Paid-In Capital	\$2,000	\$2,000
Retained Earnings	\$12,000	\$10,500
	-----	-----
Common Equity	\$14,000	\$12,500
Total Liabilities and Equity	\$33,700	\$31,500

Case (goes with module 6)

Razzle-Dazzle Electronics

Razzle-Dazzle Electronics is a small manufacturer of specialized electronic parts. Sales for last year were \$6.613 million. The firm has been your customer for several years. During your recent visit to the customer, their management was enthusiastic about their substantial recent growth and profitability, with sales growing at a 15 percent yearly rate for the last two years and returns on equity in the 20 percent range. This growth, they said, had necessitated the expansion of assets, including the purchase of a substantial amount of new equipment, which was partially financed with new term loans. They pointed out that their quick and current ratios has not declined over the period. However, payments from the firm have become increasingly slow. (Their financial statements for the last three years and a partial analysis follows.)

Complete the ratio and cash flow analysis for Razzle-Dazzle. Interpret these results starting with the ratio analysis and proceeding to the cash flow analysis; indicate what has happened to the firm's credit worthiness and why this has occurred. (Notes: (1) While the turnover ratios and days-based ratios for accounts receivable and inventory contain the same information, we are going to compute them both for practice. (2) Similarly, we are going to compute both the Total Debt/Total Assets (the "Debt Ratio") and Total Debt/Equity ratios. (3) This is a manufacturing firm so its cost of goods sold contains both purchases and other costs like factory labor, so days payable outstanding cannot be accurately computed from the information in these financial statements. To allow for this, compute the sum of the ACP and days inventory held rather than the cash conversion cycle.)

Razzle-Dazzle Electronics

Financial Statements, last three fiscal years, rounded thousands
 Reordered for Analysis Purposes: Newest Statement on Right

Year	2008	2009	2010
Income Statements			
Sales	\$5,000	\$5,750	\$6,613
Cost of Goods Sold	\$3,500	\$4,025	\$4,629
	-----	-----	-----
Gross Margin on Sales	\$1,500	\$1,725	\$1,984
Selling and Administrative Expenses	\$1,210	\$1,312	\$1,497
Depreciation	\$40	\$125	\$156
	-----	-----	-----
Earnings Before Interest and Taxes	\$250	\$288	\$331
Interest Expense	\$47	\$74	\$106
	-----	-----	-----
Earnings Before Taxes	\$203	\$214	\$225
Taxes	\$67	\$70	\$75
	-----	-----	-----
Earnings After Taxes	\$136	\$144	\$150
Dividends Paid	\$109	\$115	\$120
	-----	-----	-----
Changes in Retained Earnings	\$27	\$29	\$30
Balance Sheets			
Cash	\$136	\$100	\$35
Accounts Receivable	\$234	\$376	\$545
Inventory	\$650	\$775	\$949
	-----	-----	-----
Total Current Assets	\$1,020	\$1,251	\$1,529
Gross Equipment	\$1,000	\$1,250	\$1,562
Accumulated Depreciation	\$320	\$445	\$601
	-----	-----	-----
Net Equipment	\$680	\$805	\$961
	-----	-----	-----
Total Assets	\$1,700	\$2,056	\$2,490
Short-Term Bank Debt	\$119	\$130	\$178
Trade Payables	\$510	\$617	\$747
Current on Term Loans	\$40	\$53	\$78
Accruals	\$136	\$165	\$199
	-----	-----	-----
Total Current Liabilities	\$805	\$965	\$1,202
Term Loans	\$194	\$361	\$528
Equity	\$701	\$730	\$760
	-----	-----	-----
Total Liabilities and Equity	\$1,700	\$2,056	\$2,490

Razzle-Dazzle Electronics: Ratios

Year	2008	2009	Industry 2010 Average 2010
Liquidity			
Current Ratio	1.267		1.700
Quick Ratio	0.460		0.900
Cash Flow Liquidity Ratio		0.247	Not Avail.
Accounts Receivable:			
Accounts Receivable Turnover	21.37		7.80
Average Collection Period (days)	17.08		46.79
Inventory			
Inventory Turnover based on CGS	5.38		6.00
Days Inventory Held	67.79		60.83
Sum of ACP and Days Inv. Held	84.87		107.62
Debt Ratios			
Total Debt/Total Assets	58.76%		57.30%
Total Debt/Equity	1.43		1.34

Razzle-Dazzle Electronics: Cash Flow Analysis

Year	2008-09	2009-10
CFFO Calculations:		
Cash flow from income statement		
Earnings after Taxes	\$144	
Depreciation Addback	\$125	

Total	\$269	
Changes in accounts receivable	(\$142)	
Changes in inventory	(\$125)	
Changes in Trade Payables	\$107	
Changes in Accruals	\$29	

Total Adjustments	(\$131)	
CFFO	\$138	
Cash Flows from Investing		
Changes in Gross Equipment	(\$250)	

Cash Flows from Investing	(\$250)	
Cash Flows from Financing		
Change in Short Term Bank Debt	\$11	
Change in Current Long Term Debt	\$13	
Change in Term Loans	\$167	
Dividends Paid	(\$115)	

Cash Flows from Financing	\$76	
Change in Cash Balance	(\$36)	