

04-55b UWUCC Appr 3/15/05

Undergraduate Distance Education Review Form Senate Appr 3/29/05
(Required for all courses taught by distance education for more than one-third of teaching contact hours)

Existing and Special Topics Course

MAR - 2 2005

Course: FIN 320 - Corporate Finance

Instructor of Record: Alan Eastman phone: 7-5738 e-mail: aeastman@iup.edu

Step One: Department or its Curriculum Committee

The committee has reviewed the proposal to offer the above course using distance education technology, and responds to the CBA criteria as follows:

- 1. Will an instructor who is qualified in the distance education delivery method as well as the discipline teach the course? Yes No
- 2. Will the technology serve as a suitable substitute for the traditional classroom? Yes No
- 3. Are there suitable opportunities for interaction between the instructor and student? Yes No
- 4. a. Will there be suitable methods used to evaluate student achievement? Yes No
- b. Have reasonable efforts been made to insure the integrity of evaluation methods (academic honesty)? Yes No

5. Recommendation: Positive (The objectives of the course can be met via distance education.)

Negative

[Signature] 03/20/05
signature of department designee date

If positive recommendation, immediately forward copies of this form and attached materials to the Provost and the Liberal Studies Office for consideration by the University-Wide Undergraduate Curriculum Committee. Dual-level courses also require review by Graduate Committee for graduate-level offering. Send information copies to 1) the college curriculum committee, 2) dean of the college, and 3) Dean of the School of Continuing Education.

Step Two: UNIVERSITY-WIDE UNDERGRADUATE CURRICULUM COMMITTEE

Positive recommendation

Negative recommendation

[Signature] 3/17/05
signature of committee chair date

Forward this form to the Provost within 24 calendar days after review by committee.

Step Three: Provost

Approved as distance education course

Rejected as distance education course

[Signature] 3/31/05
signature of Provost date

Step Four:

Forward materials to Dean of the School of Continuing Education.

Rationale for responses 1 – 4 on Undergraduate Distance Education Review Form

1. Dr. Eastman has a Ph.D. in risk management and insurance and has taught finance courses at IUP for the past 8 years. Dr. Eastman currently uses online materials to supplement his in-class finance courses, and has attended WebCT instruction sessions at the Instructional Design Center.
2. Corporate Finance is a course that requires a significant time commitment from the students, who must work a sufficient number of problems to develop their problem-solving and analytical skills within the framework of financial management theory. The technology of WebCT provides students with an ample supply of questions and problems in a format that allows students to seek immediate help through solution hints, relevant examples, links to textbook pages, and the ability to consult with other students and the professor through communication tools such as Discussion Threads, Mail, Chat Rooms and a White Board. Homework and quiz progress can be monitored by the professor, and students can receive immediate feedback, allowing students to spend more time on difficult topics.
3. WebCT provides communications tools that include Discussion Pages, Mail, White Board, and Chat Rooms. Students may interact with each other and with the professor on a daily basis to discuss course material, to assist one another in the completion and understanding of assignments, and to discuss relevant current events. Some assignments will specifically require students to participate in online discussions.
4. Student performance will be evaluated based upon homework, quizzes, and exams, just as in a traditional classroom setting. Students must register with a unique user name and password, and their activity online may be monitored to determine how long each student participates in the completion of homework, quizzes, and exams. Exams are timed and given to all students at the same time to help prevent cheating.

To Whom It May Concern:

I've included the following items for your review of my proposal for teaching FIN 320, Corporate Finance, as a distance education course.

- FIN 320 Syllabus of Record
- My Proposed FIN 320 Syllabus
- WebCT Homepage
- Chapter 6 Module
 - Course Objectives Related to Chapter 6
 - Student Resources Available on WebCT and the Publisher's Website
 - Chapter 6 Homework
 - Chapter 6 Mini-case
 - Chapter 6 Web Safari
 - Chapter 6 Cyberproblem
 - Chapter 6 'Build a Model' Spreadsheet Problem
 - Chapter 6 Quiz

Materials and assignments for other chapters will be similar to the above. Web safaris, cyberproblems, and mini-cases will be used to foster class discussions on WebCT discussion boards. Other communications tools on WebCT include mail, chat rooms, and a whiteboard.

Thank you for your consideration of my proposal. Please let me know if you need any additional information.

Sincerely,



Dr. Alan Eastman
Department of Finance and Legal Studies
(724) 357-5738
aeastman@iup.edu

SYLLABUS OF RECORD
FI320 Corporate Finance

I. Catalog Description

FI320 Corporate Finance

3 credits
3 lecture hours
0 lab hours
3c-01-3sh

Prerequisite: FI310

The study of corporate financial management and decision-making, its theory and application. This course provides a higher level study of many of the same topics covered in Fundamentals of Finance, particularly in the area of capital budgeting. Other topics covered include capital asset pricing models, costs of capital, capital structure, leasing, bond refunding, and financial distress.

II. COURSE OBJECTIVES

1. Student will master valuation concepts and utilize valuation models in more complex applications.
2. Student will understand the theory of risk and return, basic portfolio theory, and capital market theory.
3. Student will be exposed to advanced capital budgeting topics such as incorporation of risk in the decision-making process, debt refinancing, and leasing.
4. Student will understand the issues related to determining the capital structure policy and dividend policy of the firm.
5. Student will become familiar with the application of option pricing models to corporate financial decisions.
6. Students will be able to utilize electronic spreadsheets and on-line sources of financial information to aid in the financial decision-making process.

III. COURSE OUTLINE

- A. Introduction and Background (10%)
 - Decision-making Goals and Objectives
 - Accounting Statements, Planning, and Forecasting
- B. Valuation (20%)
 - Time Value of Money
 - Stocks and Bonds
 - Options and Valuation
 - Opportunity Cost of Capital
- C. Risk and Return (20%)
 - Rates of Return
 - Risk/Variability of Returns
 - Portfolio Return and Risk
 - Assets pricing models
- D. Capital Budgeting (30%)
 - Weighted Average Cost of Capital
 - Costs and Incremental Cash Flows
 - Capital Budgeting Techniques
 - Capital Budgeting Applications
 - Risk and Capital Budgeting
 - Long-term Financing
 - Leasing
- E. Capital Structure (20%)
 - Capital Structure Basics
 - Capital Structure Applications
 - Dividend Policy
 - Interaction of Investment and Financing Decisions
 - Raising Long-term Funds

IV. EVALUATION METHODS

The course grade will be the weighted average of grades earned on the following assignments:

First Exam	20%
Second Exam	20
Third Exam	20
Fourth Exam	20
Homework, Lab and Other Assignments	10
Class Participation, Quizzes	10

A Comprehensive Final may be taken at the student's option and the score used to replace the lowest grade on previous exams.

Grading Scale:	90 - 100	A
	80 - 89	B
	70 - 79	C
	60 - 69	D
	below 60	F

V. REQUIRED TEXTBOOKS, SUPPLEMENTAL BOOKS AND READINGS

Ross, Stephen A., Randolph W. Westerfield, and Jeffrey Jaffe. Corporate Finance 5th ed. Irwin McGraw-Hill, 1999.

VI. BIBLIOGRAPHY

Bernstein, Peter L. Capital Ideas: The Improbable Origins of Modern Wall Street. Free Press, 1992.

Brealey, Richard A., and Stewart C. Myers. Principles of Corporate Finance, 5th ed. McGraw-Hill, 1996.

Brigham, Eugene F., Gapenski, Louis C., and Ehrhardt, Michael C. Financial Management: Theory and Practice, 9th ed. Dryden Press, 1999.

Damodaran, Aswath. Corporate Finance: Theory and Practice. Wiley, 1997.

Damodaran, Aswath. Investment Valuation. Wiley, 1996.

Pinches, George E. Financial Management. Harper-Collins, 1994.

**INDIANA UNIVERSITY OF PENNSYLVANIA
EBERLY COLLEGE OF BUSINESS AND INFORMATION TECHNOLOGY
DEPARTMENT OF FINANCE AND LEGAL STUDIES**

FIN 320: Corporate Finance
Professor: Dr. Alan D. Eastman
Office: 322F Eberly College of Business and Information Technology
Phone: (724) 357-5738
Email: aeastman@iup.edu
Office Hours: Monday, Wednesday, and Friday 11:30 am – 12:30 pm
Monday, Wednesday 2:00 pm to 3:00 pm
Other Times By Appointment
Term: Summer 2005

CATALOG COURSE DESCRIPTION

FIN 320 – Corporate Finance

Credits: 3.00

The study of corporate financial management and decision-making, its theory and application. This course provides a higher level of study and many of the same topics covered in Fundamentals of Finance, particularly in the area of capital budgeting. Other topics covered include capital asset pricing models, costs of capital, capital structure, leasing bond refunding, and financial distress.

COURSE OBJECTIVES

1. Student will master valuation concepts and utilize valuation models in more complex applications.
2. Student will understand the theory of risk and return, basic portfolio theory, and capital market theory.
3. Student will be exposed to advanced capital budgeting topics such as incorporation of risk in the decision-making process, debt refinancing, and leasing.
4. Student will understand the issues related to determining the capital structure policy and dividend policy of the firm.
5. Student will become familiar with the application of option pricing models to corporate financial decisions.
6. Student will be able to utilize electronic spreadsheets and online sources of financial information to aid in the financial decision-making process.

COURSE OVERVIEW

The COURSE OUTLINE/SYLLABUS contains information about the course, including required text, assignments, exam schedule, etc. Assignments are listed here and should be cross-referenced with the CALENDAR for assignment deadlines. The COURSE CALENDAR and the COURSE OUTLINE can be printed for easy referral throughout the semester. Since this is a distance-learning course, each student is responsible for completing the assignments as indicated in the schedule. Therefore, be sure to consult the COURSE CALENDAR AND OUTLINE on a regular basis. Please use WebCT for all correspondence.

PREREQUISITES: FIN 310

There will be absolute enforcement of every prerequisite requirement for the coursework offered by the Eberly College of Business and Information Technology. This means that students cannot postpone prerequisites and take them after the course in question.

The Dean's office is responsible for monitoring course prerequisites. Students who manage to register for coursework in spite of the fact that they do not have the appropriate prerequisite will be subject to unilateral withdrawal after the course has commenced. At that time, no appeal will be accepted and adding a different class after the official registration period will not be approved.

REQUIRED TEXT: Brigham, Eugene, and Phillip Daves. Intermediate Financial Management, 8th Edition, Thomson South-Western, 2004.

RECOMMENDED READING: *The Wall Street Journal* and other Finance Periodicals such as *Business Week*.

GRADING: The final course grade will be determined by four semester exams weighted at 8 (Exam One weighted at 15%, Exam Two weighted at 20%, Exam Three Weighted at 25%, and Exam Four weighted at 20%), quizzes and homework weighted at 10%, and a comprehensive final exam weighted at 10%. An average of 90% or above will earn an A, an average of 80% to 89% will earn a B, an average of 70% to 79% will earn a C, an average of 60% to 69% will earn a D, and an average below 60% will earn an F.

EXAMS: All exams will be taken online and will consist of multiple choice questions and problems. Short essay questions may be included depending on the nature of the material. Students may use their book and notes for exams. However, exams will be timed, so advance preparation is critical for success.

Make-up exams will not be given. If an exam is missed due to an excused absence, such as a **documented** illness or emergency, the weight of the missed exam will be added to the weight of the final exam. **Except in cases of dire emergency, no consideration will be given to any student who misses an examination without first receiving the permission of the instructor.**

QUIZZES: Quizzes will be taken online. All quizzes will consist of multiple choice questions and problems. Students may use their book and notes for quizzes. However, quizzes will be timed, so advance preparation is critical for success. Quizzes will be assigned for each chapter. Once the window for taking a quiz is closed, the quiz will be available for review. Students will be able to see the correct answers as well as the answers they selected. There will be no make-ups. Instead, the lowest two scores will be dropped.

HOMEWORK: Homework will be solved and submitted online. Students are encouraged to assist one another and to correspond with Dr. Eastman on a regular basis when working the homework problems. Homework assignments will assist in preparation for the quizzes and exams, so it is very important for students to complete these assignments and to ask questions if they are having difficulty.

ARTICLE REVIEWS: In order to encourage outside reading, extra credit points may be obtained during the semester by submitting article reviews relating to course topics. Only one article review will be accepted per week. Article reviews must be submitted online by Sunday night at midnight for the previous week. Each article must be current. If the article is from a magazine or journal, it must be from the most recent issue. If the article is from a newspaper, such as the Wall Street Journal, it must be from the current or previous week. If the article is obtained online, it must relate to an event occurring during the current or the previous week. A proper citation for the article must be submitted, along with a brief summary. The summary should describe the article and also relate the topic or issue to one covered in

the course. Be as specific as possible in linking the article to class material. Each review will be assigned a score of zero, one, or two extra credit points. A maximum of 10 extra credit points may be earned during the semester. These points will be added onto the final exam score. Grammar and spelling will be considered when assigning a score. One point will be deducted for each error after the first error. In other words, a review with no errors or with one error can receive a maximum score of two points; a review with two errors can receive a maximum score of one point; and all other reviews will receive zero points.

PARTICIPATION: No formal classroom meetings are scheduled or required. Students are encouraged to correspond with one another and with Dr. Eastman via WebCT Communications Tools, which consist of Discussion Pages, Chat Rooms, a White Board, and Mail. Students who participate in online correspondence will learn more, enjoy the class more, and perform better on quizzes and examinations than students who "go it alone."

ASSIGNMENTS: Assignments are noted for each section of the course leading up to an exam. Students need to work regularly to complete assignments in a timely manner. Quizzes and exams must be completed online during defined windows of opportunity. Please make sure that you are available during the scheduled times.

Online Exam Schedule:

- Exam One, chapters 1, 4, and 5
- Exam Two, chapters 6 - 10
- Exam Three, chapters 11 - 12, 16 - 19
- Exam Four, chapters 2, 3, 13 - 15
- Final Exam, chapters 1 - 19

Reminders:

- Please review carefully the course outline/syllabus/schedule.
- Additional readings, problems, and cases may be assigned.
- Practice or lecture quizzes are not included in the grading process.
- All exams are open book and open notes.
- Solutions to problems for submission are due no later than midnight of the date of the assignment.
- If you have any questions, please email Dr. Eastman through WebCT.

Schedule:

July 11

- Review course outline
- Review text
- Review WebCT
- E-mail student biography (one paragraph) to Dr. Eastman along with any concerns/questions about the course
- Reading assignment – Chapter 1
- Homework – Chapter 1: all problems on Finance Works (4 total)
- Quiz – Chapter 1 (to be completed by midnight 7/12/05)

July 12

- Reading assignment – Chapter 2
- Homework – Chapter 2: all assigned problems on Finance Works (10 total)
- Quiz – Chapter 2 (to be completed by midnight 7/13/05)

July 13

- Reading assignment – Chapter 3
- Homework – Chapter 3: all assigned problems on Finance Works (6 total)
- Quiz – Chapter 3 (to be completed by midnight 7/14/05)
- Last day of drop/add period

July 14

- Homework – Chapter 3: all assigned problems on Finance Works (3 total)
- Review for exam, practice test available
- Reminder, complete chapter 3 quiz by midnight

July 15

- Exam One (online) covering chapters 1 – 3, 7:00 pm to 9:00 pm.

July 18

- Reading assignment – Chapter 4
- Homework – Chapter 4: all assigned problems on Finance Works (15 total)

July 19

- Reading assignment – Chapter 4
- Homework – Chapter 4: all assigned problems on Finance Works (8 total)
- Homework – Chapter 4: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 4 (to be completed by midnight 7/19/05)

July 20

- Reading assignment – Chapter 5

- Homework – Chapter 5: all assigned problems on Finance Works (8 total)
- Homework – Chapter 5: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 5 (to be completed by midnight 7/21/05)

July 21

- Reading assignment – Chapter 6
- Homework – Chapter 6: all assigned problems on Finance Works (8 total)
- Homework – Chapter 6: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 6 (to be completed by midnight 7/22/05)

July 22

- Reading assignment – Chapter 7
- Homework – Chapter 7: all assigned problems on Finance Works (8 total)
- Homework – Chapter 7: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 7 (to be completed by midnight 7/25/05)

July 25

- Homework – Chapters 4 – 7 review: all assigned problems on Finance Works (10 total)
- Review for exam two, practice test available
- Reminder, complete chapter 7 quiz by midnight

July 26

- Exam Two (online) covering chapters 4 -- 7, 7:00 pm to 9:00 pm

July 27

- Reading assignment – Chapter 8
- Homework – Chapter 8: all assigned problems on Finance Works (7 total)
- Homework – Chapter 8: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 8 (to be completed by midnight 7/28/05)

July 28

- Reading assignment – Chapter 8 (continued)
- Homework – Chapter 8: all assigned problems on Finance Works (7 total)
- Reminder: complete chapter 8 quiz by midnight

July 29

- Reading assignment – Chapter 9
- Homework – Chapter 9: all assigned problems on Finance Works (8 total)
- Homework – Chapter 9: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 9 (to be completed by midnight 8/01/05)

August 1

- Reading assignment – Chapter 11
- Homework – Chapter 11: all assigned problems on Finance Works (8 total)
- Quiz – Chapter 11 (to be completed by midnight 8/2/05)

August 2

- Homework – Chapters 8, 9 and 11 review: all assigned problems on Finance Works (5 total)
- Review for exam two, practice test available
- Reminder, complete chapter 11 quiz by midnight

August 3

- Exam Three (online) covering chapters 8, 9, and 11, 7:00 pm to 9:00 pm

August 4

- Reading assignment – Chapter 14
- Homework – Chapter 14: all assigned problems on Finance Works (5 total)
- Quiz – Chapter 14 (to be completed by midnight 8/5/05)

August 5

- Reading assignment – Chapter 15
- Homework – Chapter 15: all assigned problems on Finance Works (5 total)
- Quiz – Chapter 15 (to be completed by midnight 8/8/05)

August 8 – 10

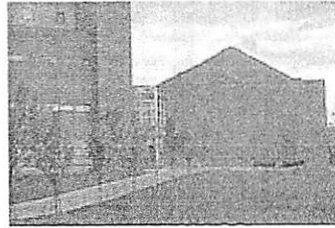
- Reminder, chapter 15 quiz to be completed by midnight on August 8th
- Complete 4 Web Exercises, choosing from chapters 2, 3, 4, 5, 7, 8, 11, 14 (to be completed by midnight 8/10/05)
- Reminder, spreadsheet exercises are due by midnight on 8/10/05
- Review for final exam
- Practice tests available

August 11

- Comprehensive Final Exam (online) covering chapters 1-9, 11, 13, and 14, 7:00 pm to 9:00 pm

Welcome to FIN 320: Corporate Finance

An Online Distance Education Course Offered By The...



Eberly College of Business and Information Technology

And Taught By...



Dr. Alan D. Eastman



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SOUTH-WESTERN

WebTUTOR to accompany.

*Intermediate
Financial Management, 8e*

Brigham • Daves



Syllabus



Course Info



Contents



Resources



Communicate



Calendar



Student Progress



Course Tools



Resume Session



Quizzes
(Hidden)



Solutions Manual



Chapter 6: Accounting for Financial Management

Course Objectives

1. Student will master valuation concepts and utilize valuation models in more complex applications.
6. Students will be able to utilize electronic spreadsheets and online sources of financial information to aid in the financial decision-making process.

The course overview highlights the chapter's emphasis on financial valuation concepts, including market value added and economic value added. This emphasis helps fulfill course objective one.

The spreadsheet assets section outlines several ways in which spreadsheet development and analysis are included in this chapter. The Web Safari exercises, included in the Web Links section, require students to access financial information online. In the chapter 6 Web Safari, students are required to get information from Edgarscan, an online database, and incorporate the information into an Excel spreadsheet. Spreadsheet exercises and illustrations, as well as Web Safari exercises, help fulfill course object six.

**Student Resources Available on
WebCT and the Publisher's Website**

▼ **Course Menu**

Homepage
Calendar/Due Dates
Communicate
Resume Session

Table of Contents

- ▼ 6. Chapter 6: Accounting for Financial Management
 - 6.1. Overview
 - 6.2. Outline
 - 6.3. Spreadsheets Assets
 - 6.4. *Matching Quiz*
 - 6.5. *Problems*
 - 6.6. PowerPoint
 - 6.7. Glossary
 - 6.8. Web Links
 - 6.9. Thomson Analytics
 - 6.10. Text Support Site

Table of Contents

6. Chapter 6: Accou

- 6.1. Overview
- 6.2. Outline
- 6.3. Spreadsheets
- 6.4. *Matching Quiz*
- 6.5. *Problems*
- 6.6. PowerPoint
- 6.7. Glossary
- 6.8. Web Links
- 6.9. Thomson Ana
- 6.10. Text Support

Overview

Financial management requires the con-sideration of the types of financial statements firms must provide to investors. Thus, this chapter begins with a discussion of the basic financial statements, how they are used, and what kinds of financial information users need.

The value of any asset depends on the usable, or after-tax, cash flows the asset is expected to produce, so the chapter explains the term net cash flow. Since the traditional financial statements are designed more for use by creditors than for corporate managers and stock analysts, the chapter discusses how to modify accounting data for managerial decisions. In addition, the concepts of Market Value Added (MVA) and Economic Value Added (EVA) are defined and explained. Finally, since it is the after-tax income that is important, the chapter provides an overview of the federal income tax system.

Table of Contents

Spreadsheet Assets

- 6. Chapter 6: Accol
 - 6.1. Overview
 - 6.2. Outline **Tool Kits**
 - ◆ 6.3. Spreadsheets
 - 6.4. *Matching Quiz* **Tool Kits** for each chapter show how the calculations required in that chapter were done. The Tool Kit models include comments and screen shots that explain how to use many of the features and functions of Excel, so Tool Kits also serve as self-taught tutorials.
 - 6.5. *Problems*
 - 6.6. PowerPoint
 - 6.7. Glossary
 - 6.8. Web Links
 - 6.9. Thomson Ana
 - 6.10. Text Support **Beginning-of-Chapter Spreadsheet Models**

These spreadsheet models illustrate the answers to the integrative questions presented at the start of each chapter.

Mini Case Spreadsheet Models

These spreadsheets contain the data for the Mini Cases and allow for what-if analysis.

Build a Model Spreadsheet Templates

These spreadsheet templates were developed to facilitate students in working the Build a Model spreadsheet problems at the end of each chapter.

Table of Contents

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- 6. Chapter 6: Accol
 - 6.1. Overview
 - 6.2. Outline
 - 6.3. Spreadsheets
 - 6.4. *Matching Quiz*
 - 6.5. *Problems*
 - ◆ 6.6. PowerPoint **PowerPoint**
The PowerPoint slides are based on the Mini Cases, in which graphs, tables, lists, and calculations are developed sequentially, much as one might develop them on a blackboard or in transparencies.
 - 6.7. Glossary
 - 6.8. Web Links
 - 6.9. Thomson Ana
 - 6.10. Text Support

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Table of Contents

- 6. Chapter 6: Account
- 6.1. Overview
- 6.2. Outline
- 6.3. Spreadsheets
- 6.4. *Matching Quiz*
- 6.5. *Problems*
- 6.6. PowerPoint
- 6.7. Glossary
- 6.8. Web Links
- 6.9. Thomson Analytics
- 6.10. Text Support

Links Resources

Cyberproblems (Chapter 6)

Cyberproblems plug students into the Internet, allowing them to hone Web research skills to solve financial problems.

URL:

<http://www.swcollege.com/finance/bingham/cyberproblems/cyber3M.html>

Web Safaris (Financial Statements)

Search the Internet for data to help you answer specific questions presented at the beginning of each safari.

URL:

<http://www.swcollege.com/finance/bingham/finse/safari/safar06.html>

Table of Contents

- 6. Chapter 6: Account
- 6.1. Overview
- 6.2. Outline
- 6.3. Spreadsheets
- 6.4. *Matching Quiz*
- 6.5. *Problems*
- 6.6. PowerPoint
- 6.7. Glossary
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- 6.9. Thomson Analytics
- 6.10. Text Support



Thomson Analytics - Business School Edition

Use the Thomson Analytics - Business School Edition academic online database to access a full range of fundamental financials, earnings estimates, market data, and source documents for 500 real-world companies. Thomson Analytics is a product of Thomson Financial's Investment Banking Group - this is your opportunity to access and apply the industry's most reliable information to answer discussion questions and work through group projects!

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Student Resources

Use the links below to download available Student Resources accompanying this book.

For additional information about South-Western's Finance publishing program, visit the [Finance Resource Center](#). For ordering information call customer support at **(800) 354-9706**.

For technical support, call **(800) 423-0563** or email us at support@thomsonlearning.com.

Intermediate Financial Management, 7e by EUGENE F. BRIGHAM and PHILLIP R. DAVIES

Study Guide

ISBN: 0-324-25894-1

Prepared by Eugene F. Brigham and Phillip R. Daves

This supplement outlines the key sections of each chapter, and it provides students with a set of questions and problems similar to those in the text and in the Test Bank, along with worked-out solutions.

Download Sample Chapter: [Study Guide Chapter 3](#) (Word 97 - right click to download)



Thomson Analytics - Business School Edition

Free access provided with new textbook purchase.

Click here to learn more: [Thomson Analytics](#)

Cyberproblems

Prepared by Eugene F. Brigham and Phillip R. Daves

Most chapters contain Cyberproblems that require students to go to specific Web sites and answer a series of questions. The problems are posted here and updated periodically to keep them current.

Go to: [Cyberproblems page](#)

Web Extensions

Prepared by Eugene F. Brigham and Phillip R. Daves

View extensions to select chapters using Adobe Acrobat Reader.

Go to: [Web Extensions download page](#)

Web Chapters

Prepared by Eugene F. Brigham and Phillip R. Daves

View Chapters 28 and 29 using Adobe Acrobat Reader.

Go to: [Web Chapters download page](#)

PowerPoint Slides

Prepared by Eugene F. Brigham and Phillip R. Daves

These PowerPoint slides are based on the Mini Cases, in which graphs, tables, lists, and calculations are developed sequentially, much as one might develop them on a blackboard or in transparencies.

Go to: [PowerPoint Slides download page](#)

Present Value / Future Value Tables

Now available in Excel format, students and instructors may view tables for the Future Value of a Lump Sum, Present Value of a Lump Sum, Future Value of an Annuity, and Present Value of an Annuity.

Go to: [Present Value / Future Value Tables download page](#)

Tool Kits

Prepared by Eugene F. Brigham and Phillip R. Daves

Tool Kits for each chapter show how the calculations required in that chapter were done. The Tool Kit models include comments and screen shots that explain how to use many of the features and functions of Excel, so the Tool Kits also serve as self-taught tutorials.

Go to: [Tool Kits download page](#)

Beginning-of-Chapter Spreadsheet Models

Prepared by Eugene F. Brigham and Phillip R. Daves

These spreadsheet models illustrate the answers to the integrative questions presented at the start of each chapter.

Go to: [Beginning-of-Chapter Spreadsheets download page](#)

Mini Case Spreadsheet Models

Prepared by Eugene F. Brigham and Phillip R. Daves

These spreadsheets contain the data for the Mini Cases and allow for what-if analysis.

Go to: [Mini Case Spreadsheets download page](#)

Build a Model Spreadsheet Templates

Prepared by Eugene F. Brigham and Phillip R. Daves

These spreadsheet templates were developed to facilitate students in working the Build a Model spreadsheet problems at the end of each chapter.

Go to: [Build a Model download page](#)

Web Safaris

Prepared by Eugene F. Brigham and Phillip R. Daves

Search the Internet for data to help you answer specific questions presented at the beginning of each file.

Go to: [Web Safaris](#)

Chapter 6 Assignments

- g. Market Value Added; Economic Value Added
 - h. Progressive tax; taxable income; marginal and average tax rates
 - i. Capital gain or loss; tax loss carry-back and carry-forward
 - j. Improper accumulation; S corporation
- (6-2) What four statements are contained in most annual reports?
- (6-3) If a "typical" firm reports \$20 million of retained earnings on its balance sheet, could its directors declare a \$20 million cash dividend without any qualms whatsoever?
- (6-4) Explain the following statement: "While the balance sheet can be thought of as a snapshot of the firm's financial position *at a point in time*, the income statement reports on operations *over a period of time*."
- (6-5) What is operating capital, and why is it important?
- (6-6) Explain the difference between NOPAT and net income. Which is a better measure of the performance of a company's operations?
- (6-7) What is free cash flow? Why is it the most important measure of cash flow?
- (6-8) What does *double taxation of corporate income* mean?
- (6-9) If you were starting a business, what tax considerations might cause you to prefer to set it up as a proprietorship or a partnership rather than as a corporation?

PROBLEMS

Note: By the time this book is published, Congress might have changed rates and/or other provisions of current tax law—as noted in the chapter, such changes occur fairly often. Work all problems on the assumption that the information in the chapter is applicable.

- (6-1) Personal After-Tax Yield An investor recently purchased a corporate bond which yields 9 percent. The investor is in the 36 percent tax bracket. What is the bond's after-tax yield?
- (6-2) Personal Taxes Joe and Jane Keller are a married couple who file a joint income tax return. The couple's taxable income was \$97,000. Ignoring exemptions and deductions, how much federal tax did they owe? Use the tax tables given in the chapter.
- (6-3) Personal After-Tax Yield Corporate bonds issued by Johnson Corporation currently yield 8 percent. Municipal bonds of equal risk currently yield 6 percent. At what tax rate would an investor be indifferent between these two bonds?
- (6-4) Corporate Tax Liability The Talley Corporation had a taxable income of \$365,000 from operations after all operating costs but before (1) interest charges of \$50,000, (2) dividends received of \$15,000, (3) dividends paid of \$25,000, and (4) income taxes. What is the firm's income tax liability and its after-tax income? What are the company's marginal and average tax rates on taxable income?
- (6-5) Corporate Tax Liability The Wendt Corporation had \$10.5 million of taxable income from operations in 2002.
- a. What is the company's federal income tax bill for the year?
 - b. Assume the firm receives an additional \$1 million of interest income from some bonds it owns. What is the tax on this interest income?
 - c. Now assume that Wendt does not receive the interest income but does receive an additional \$1 million as dividends on some stock it owns. What is the tax on this dividend income?
- (6-6) Corporate After-Tax Yield The Shrieves Corporation has \$10,000 that it plans to invest in marketable securities. It is choosing among AT&T bonds, which yield 7.5 percent, state of Florida muni bonds, which yield 5 percent, and AT&T preferred stock, with a dividend yield of 6 percent. Shrieves' corporate tax rate is 35 percent, and 70 percent of the dividends received are tax exempt. Assuming that the investments are equally risky and

that Shrieves chooses strictly on the basis of after-tax returns, which security should be selected? What is the after-tax rate of return on the highest-yielding security?

(6-7) Cash Flow The Klaven Corporation has operating income (EBIT) of \$750,000. The company's depreciation expense is \$200,000. Klaven is 100 percent equity financed, and it faces a 40 percent tax rate. What is the company's net income? What is its net cash flow?

(6-8) Income and Cash Flow Analysis The Menendez Corporation expects to have sales of \$12 million in 2004. Costs other than depreciation are expected to be 75 percent of sales, and depreciation is expected to be \$1.5 million. All sales revenues will be collected in cash, and costs other than depreciation must be paid for during the year. Menendez's federal-plus-state tax rate is 40 percent.

- Set up an income statement. What is Menendez's expected net cash flow?
- Suppose Congress changed the tax laws so that Menendez's depreciation expenses doubled. No changes in operations occurred. What would happen to reported profit and to net cash flow?
- Now suppose that Congress, instead of doubling Menendez's depreciation, reduced it by 50 percent. How would profit and net cash flow be affected?
- If this were your company, would you prefer Congress to cause your depreciation expense to be doubled or halved? Why?

(6-9) Free Cash Flow You have just obtained financial information for the past 2 years for Powell Panther Corporation. Answer the following questions.

- What is the net operating profit after taxes (NOPAT) for 2003?
- What are the amounts of net operating working capital for 2002 and 2003?
- What are the amounts of total net operating capital for 2002 and 2003?
- What is the free cash flow for 2003?
- How can you explain the large increase in dividends in 2003?

Powell Panther Corporation: Income Statements for Year Ending December 31
(Millions of Dollars)

	2003	2002
Sales	\$1,200.0	\$1,000.0
Operating costs excluding depreciation	1,020.0	850.0
Depreciation	<u>30.0</u>	<u>25.0</u>
Earnings before interest and taxes	\$ 150.0	\$ 125.0
Less interest	<u>21.7</u>	<u>20.2</u>
Earnings before taxes	\$ 128.3	\$ 104.8
Taxes (40%)	<u>51.3</u>	<u>41.9</u>
Net income available to common stockholders	\$ <u>77.0</u>	\$ <u>62.9</u>
Common dividends	60.5	4.4

Powell Panther Corporation: Balance Sheets as of December 31 (Millions of Dollars)

	2003	2002
Assets		
Cash and equivalents	\$ 12.0	\$ 10.0
Short-term investments	0.0	0.0
Accounts receivable	180.0	150.0
Inventories	<u>180.0</u>	<u>200.0</u>
Total current assets	\$372.0	\$360.0
Net plant and equipment	<u>300.0</u>	<u>250.0</u>
Total assets	<u>\$672.0</u>	<u>\$610.0</u>

(continues)

Powell Panther Corporation: Balance Sheets as of December 31 (Millions of Dollars) (continued)

	2003	2002
<i>Liabilities and Equity</i>		
Accounts payable	\$108.0	\$ 90.0
Notes payable	67.0	51.5
Accruals	<u>72.0</u>	<u>60.0</u>
Total current liabilities	\$247.0	\$201.5
Long-term bonds	<u>150.0</u>	<u>150.0</u>
Total liabilities	\$397.0	\$351.5
Common stock (50 million shares)	50.0	50.0
Retained earnings	<u>225.0</u>	<u>208.5</u>
Common equity	\$275.0	\$258.5
Total liabilities and equity	<u>\$672.0</u>	<u>\$610.0</u>

(6-10) **Loss Carry-Back, Carry-Forward** The Herrmann Company has made \$150,000 before taxes during each of the last 15 years, and it expects to make \$150,000 a year before taxes in the future. However, in 2003 the firm incurred a loss of \$650,000. The firm will claim a tax credit at the time it files its 2003 income tax return, and it will receive a check from the U.S. Treasury. Show how it calculates this credit, and then indicate the firm's tax liability for each of the next 5 years. Assume a 40 percent tax rate on *all* income to ease the calculations.

(6-11) **Form of Organization** Susan Visscher has operated her small restaurant as a sole proprietorship for several years, but projected changes in her business's income have led her to consider incorporating. Visscher is married and has two children. Her family's only income, an annual salary of \$52,000, is from operating the business. (The business actually earns more than \$52,000, but Susan reinvests the additional earnings in the business.) She itemizes deductions, and she is able to deduct \$8,200. She can claim four personal exemptions. (Assume the personal exemption remains at \$3,000 and the tax rates remain as they are in 2002.) Of course, her actual taxable income, if she does not incorporate, would be higher by the amount of reinvested income. Visscher estimates that her business earnings before salary and taxes for the period 2004 to 2006 will be:

Year	Earnings before Salary and Taxes
2004	\$ 70,000
2005	95,000
2006	\$110,000

- a. What would her total taxes (corporate plus personal) be in each year under
 - (1) A non-S corporate form of organization? (2004 tax = \$6,870.)
 - (2) A proprietorship? (2004 tax = \$7,242.)
- b. Should Visscher incorporate? Discuss.

(6-12) **Personal Taxes** Mary Jarvis, a single individual, has this situation for the year 2003: salary of \$82,000; dividend income of \$12,000; interest on Disney bonds of \$5,000; interest on state of Florida municipal bonds of \$10,000; proceeds of \$22,000 from the sale of Disney stock purchased in 1986 at a cost of \$9,000; and proceeds of \$22,000 from the November 2003 sale of Disney stock purchased in October 2002 at a cost of \$21,000. Jarvis gets one exemption (\$3,000), and she has allowable itemized deductions of \$7,100; these amounts will be deducted from her gross income to determine her taxable income. Assume the tax rate schedule is the same as in 2002.

CYBERPROBLEM

Please go to our web site, <http://brigham.swlearning.com>, to access the Cyberproblems.



With your Xtra! CD-ROM, access the Thomson Analytics Problems and use the Thomson Analytics Academic online database to work this chapter's problems.

MINI CASE



See Ch 06 Show.ppt for a PowerPoint presentation of the Mini Case and Ch 06 Mini Case.xls for detailed calculations.

Donna Jamison, a 1999 graduate of the University of Tennessee with four years of banking experience, was recently brought in as assistant to the chairman of the board of Computron Industries, a manufacturer of electronic calculators.

The company doubled its plant capacity, opened new sales offices outside its home territory, and launched an expensive advertising campaign. Computron's results were not satisfactory, to put it mildly. Its board of directors, which consisted of its president and vice-president plus its major stockholders (who were all local businesspeople), was most upset

when directors learned how the expansion was going. Suppliers were being paid late and were unhappy, and the bank was complaining about the deteriorating situation and threatening to cut off credit. As a result, Al Watkins, Computron's president, was informed that changes would have to be made, and quickly, or he would be fired. Also, at the board's insistence Donna Jamison was brought in and given the job of assistant to Fred Campo, a retired banker who was Computron's chairman and largest stockholder. Campo agreed to give up a few of his golfing days and to help nurse the company back to health, with Jamison's help.

Jamison began by gathering financial statements and other data.

	2002	2003
BALANCE SHEETS		
<i>Assets</i>		
Cash	\$ 9,000	\$ 7,282
Short-term investments	48,600	20,000
Accounts receivable	351,200	632,160
Inventories	715,200	1,287,360
Total current assets	\$1,124,000	\$1,946,802
Gross fixed assets	491,000	1,202,950
Less: Accumulated depreciation	146,200	263,160
Net fixed assets	\$ 344,800	\$ 939,790
Total assets	\$1,468,800	\$2,886,592
<i>Liabilities and Equity</i>		
Accounts payable	\$ 145,600	\$ 324,000
Notes payable	200,000	720,000
Accruals	136,000	284,960
Total current liabilities	\$ 481,600	\$1,328,960
Long-term debt	323,432	1,000,000
Common stock (100,000 shares)	460,000	460,000
Retained earnings	203,768	97,632
Total equity	\$ 663,768	\$ 557,632
Total liabilities and equity	\$1,468,800	\$2,886,592

	2002	2003
INCOME STATEMENTS		
Sales	\$3,432,000	\$5,834,400
Cost of goods sold	2,864,000	4,980,000
Other expenses	340,000	720,000
Depreciation	18,900	116,960
Total operating costs	<u>\$3,222,900</u>	<u>\$5,816,960</u>
EBIT	\$ 209,100	\$ 17,440
Interest expense	62,500	176,000
EBT	\$ 146,600	\$ (158,560)
Taxes (40%)	58,640	(63,424)
Net income	<u>\$ 87,960</u>	<u>\$ (95,136)</u>
OTHER DATA		
Stock price	\$ 8.50	\$ 6.00
Shares outstanding	100,000	100,000
EPS	\$ 0.880	\$ (0.951)
DPS	\$ 0.220	\$ 0.110
Tax rate	40%	40%

STATEMENT OF RETAINED EARNINGS, 2003

Balance of retained earnings, 12/31/2002	\$ 203,768
Add: Net income, 2003	(95,136)
Less: Dividends paid, 2003	(11,000)
Balance of retained earnings, 12/31/2003	<u>\$ 97,632</u>

STATEMENT OF CASH FLOWS, 2003

<i>Operating Activities</i>	
Net income	(\$ 95,136)
Adjustments:	
Noncash adjustments:	
Depreciation	116,960
Changes in working capital:	
Change in accounts receivable	(280,960)
Change in inventories	(572,160)
Change in accounts payable	178,400
Change in accruals	148,960
Net cash provided by operating activities	(\$ 503,936)
<i>Long-Term Investing Activities</i>	
Cash used to acquire fixed assets	(\$ 711,950)
<i>Financing Activities</i>	
Change in short term investments	\$ 28,600
Change in notes payable	520,000
Change in long-term debt	676,568
Change in common stock	—
Payment of cash dividends	(11,000)
Net cash provided by financing activities	<u>\$1,214,168</u>

Summary

Net change in cash	(\$ 1,718)
Cash at beginning of year	9,000
Cash at end of year	<u>\$ 7,282</u>

Assume that you are Jamison's assistant, and you must help her answer the following questions for Campo.

- a. What effect did the expansion have on sales and net income? What effect did the expansion have on the asset side of the balance sheet? What effect did it have on liabilities and equity?
- b. What do you conclude from the statement of cash flows?
- c. What is free cash flow? Why is it important? What are the five uses of FCF?
- d. What are operating current assets? What are operating current liabilities? How much net operating working capital and total net operating capital does Computron have?
- e. What are Computron's net operating profit after taxes (NOPAT) and free cash flow (FCF)?
- f. Calculate Computron's return on invested capital. Computron has a 10 percent cost of capital (WACC). Do you think Computron's growth added value?
- g. Jamison also has asked you to estimate Computron's EVA. She estimates that the after-tax cost of capital was 10 percent in both years.
- h. What happened to Computron's market value added (MVA)?
- i. Assume that a corporation has \$100,000 of taxable income from operations plus \$5,000 of interest income and \$10,000 of dividend income. What is the company's tax liability?
- j. Working with Jamison has required you to put in a lot of overtime, so you have had very little time to spend on your private finances. It's now April 1, and you have only two weeks left to file your income tax return. You have managed to get all the information together that you will need to complete your return. Computron paid you a salary of \$45,000, and you received \$3,000 in dividends from common stock that you own. You are single, so your personal exemption is \$3,000, and your itemized deductions are \$7,100.
 - (1) On the basis of the information above and the individual tax rate schedule shown in this chapter, what is your tax liability?
 - (2) What are your marginal and average tax rates?
- k. Assume that after paying your personal income tax as calculated in part j, you have \$5,000 to invest. You have narrowed your investment choices down to California bonds with a yield of 7 percent or equally risky Exxon Mobil bonds with a yield of 10 percent. Which one should you choose and why? At what marginal tax rate would you be indifferent to the choice between California and Exxon Mobil bonds?

SELECTED ADDITIONAL REFERENCES

The effects of alternative accounting policies on financial statements are discussed in the investment textbooks referenced in Chapter 2 and also in the many excellent texts on financial statement analysis. For example, see

Fraser, Lyn M., and Aileen Ormiston, *Understanding Financial Statements* (Englewood Cliffs, NJ: Prentice-Hall, 2001).

For an excellent treatment of the relationship between free cash flows and the value of a company, see

Copeland, Tom, Tim Koller, and Jack Murrin, *Valuation: Measuring and Managing the Value of Companies* (New York: John Wiley & Sons, Inc., 2001).

Stewart, G. Bennett, *The Quest for Value* (New York: Harper Collins, 1991).

The following articles provide additional information on the effect of corporate taxes on business behavior:

Angell, Robert J., and Tony Wingler, "A Note on Expensing versus Depreciating under the Accelerated Cost Recovery System," *Financial Management*, Winter 1982, 34-35.

McCarty, Daniel E., and William R. McDaniel, "A Note on Expensing versus Depreciating under the Accelerated Cost Recovery System: Comment," *Financial Management*, Summer 1983, 37-39.

For a good reference guide to tax issues, see *Federal Tax Course* (Englewood Cliffs, NJ: Prentice-Hall, published annually).

Chapter 6 Web Safari

Financial Statements

Question: What was IBM's most recent Net Income? How does its Net Income compare with its Operating Cash Flow? How can you get its financial statements into an Excel worksheet? This web safari will show you how to answer questions such as these.

Go to <http://edgarscan.pwcglobal.com>. You will click on [Enter] EDGARSCAN.

After clicking [Enter] EDGARSCAN, you will come to the database query screen. On this screen, you will be able to input a Company Name or Ticker Symbol to search the SEC EDGAR Database. We have chosen to find financial information for IBM. Once you input your company's name or ticker symbol, you will click the search button.

After clicking on search, you will come to a screen with links to extracted financial data, recent filings, and quarterly filings. You will have the option to open Extracted Financial Data for IBM. Click on hypertextual table to view some of the financial data.

After clicking on hypertextual table, you will come to a screen that shows a simple Balance Sheet, Income Statement, and Cash Flow Statement for IBM for recent quarters.

We have extracted some of this data and put it in Table 1 below for illustrative purposes. The K below a year indicates the data is from the annual 10K report. The Q indicates that it is from the quarterly report.

Using the data in the Table 1 below, what was IBM's most recent Net Income? (As the cell in yellow shows, it was \$3,579 million.) How does its Net Income compare with its Operating Cash Flow? (The cell in turquoise shows the Cash Flow from Operations of \$13,788 million, which is a good deal larger than its Net Income of \$3,579 million.)

Table 1
INTERNATIONAL BUSINESS MACHINES CORP
Extracted Financial Data
(Dollar amounts in millions)

Balance Sheet	2003 Q/1	2002 K	2002 Q/3	2002 Q/2	2002 Q/1	2001 K	2001 Q/3	2001 Q/2
Assets								
Cash, \$	4,195	5,382	5,216	3,453	5,382	6,330	6,330	6,330
Receivables, \$	9,542	9,915	8,449	8,514	9,915	9,101	9,101	9,101
Inventory, \$		3,148	3,424	3,842	4,407	4,304	4,304	4,304
Deferred Tax Asset, \$	2,423	2,617	2,315	2,436	2,617	2,402	2,402	2,402
Other Current Assets, \$	2,423	2,554	2,068	1,920	2,379	2,344	2,222	2,222
Current Assets, \$	39,737	41,652	37,316	36,723	41,652	42,461	42,461	42,461
Net Property Plant & Equipment, \$	14,363	14,440	14,451	14,712	14,440	16,504	16,504	16,504
Total Assets, \$	95,720	96,484	83,956	84,211	96,484	90,303	88,313	88,313
Liabilities								
Accounts Payable, \$	21,346	7,630	18,435	19,403	23,043	7,047	19,287	19,287
Income Tax Expense, \$		2,190			499	3,304	2,263	1,596
Current Liabilities, \$	31,786	34,550	30,239	32,597	34,550	35,119	35,119	35,119
Common Equity, \$	15,257	14,858	14,572	14,520	14,858	14,248	14,248	14,248
Preferred Stock, \$						0	0	247
Deferred Tax, \$								
Long Term Debt, \$	20,036	19,986	17,773	16,270	19,986	15,963	15,963	15,963
Total Debt, \$	25,803	26,017	25,744	25,841	26,017	27,151	27,151	27,151
Total Liabilities, \$	71,147	73,702	61,864	62,816	73,702	66,855	64,699	64,699
Retained Earnings, \$	32,314	31,555	31,653	30,742	31,555	30,142	30,142	30,142
Shareholders' Equity, \$	24,573	22,782	22,092	21,395	22,782	23,448	23,614	23,614

Income Statement	2003 Q/1	2002 K	2002 Q/3	2002 Q/2	2002 Q/1	2001 K	2001 Q/3	2001 Q/2
Total Operating Revenue, \$	20,065	81,186	57,502	37,681	18,030	83,067	60,926	41,143
Cost of Goods Sold, \$								
Research and Development, \$	1,195	4,750	3,546	2,333	1,135	4,986	3,745	2,493
Sales, General & Admin., \$	4,215		13,298	9,311	4,023	17,197	12,350	8,265
Interest Expense, \$	40	145	97	63	30	234	181	128
Income Before Tax, \$					1,691	10,953	7,653	5,391
Operating Income, \$								
Net Income, \$	1,981	3,579	4,812	2,408	1,813	7,723	7,856	5,448

Cash flow statement	2003 Q/1	2002 K	2002 Q/3	2002 Q/2	2002 Q/1	2001 K	2001 Q/3	2001 Q/2
Operating Activities, \$		13,788			2,655	13,966	9,433	5,387
Investing Activities, \$					-1,457	-6,106	-5,101	-2,674
Financing Activities, \$					-3,678	-5,309	-4,148	-2,544
Cash at Year Start, \$	5,382	6,330	6,330	6,330	6,330	3,563	3,563	3,563
Cash at Year End, \$	4,195	5,382	5,216	3,453	3,833	6,330	3,715	3,691

Three Additional Ways to Use EDGARSCAN:

1. EDGARSCAN also allows you to create graphs using the financial data for IBM. By clicking on Benchmarking Assistant (shown below with hand icon), you can create graphs to fundamentally compare IBM's financial ratios.
2. EDGARSCAN also allows you to download Financial Data for IBM. You will be able to download the Financial Data into an Excel Spreadsheet by clicking on Excel Spreadsheet. If you just click, it will open the Excel spreadsheet into your browser.
3. EDGARSCAN allows you to get more detailed Financial Statements for IBM. As you scroll down the initial screen for IBM, you will see all the Annual Filings, Quarterly Filings, and Other Filings available for IBM. By clicking on

- any of these Filings, you will be taken to a more detailed Financial Statement for IBM than in the Extracted Financial Data section.

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Cyberproblem

Financial Statements, Cash flow, and Taxes - 3M Company

A manager's primary goal is to maximize the value of his or her firm's stock. The stock's value is calculated as the present value of the firm's future cash flow stream. A study of a firm's financial statements provides clues to its past, present, and likely future performance. Managers must understand financial statements because their actions have a direct impact on them. Managers and investors alike need to know how to read and interpret financial statements.

Let's examine Minnesota Mining and Manufacturing (otherwise known as 3M) Company's financial statements as reported in its 2001 Annual Report, which can be found at http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=MMM&script=950.

- a. Did 3M have more or less cash as of December 31, 2001 than it did as of December 31, 2000? How does this affect the firm's liquidity?
- b. What was 3M's method for valuing inventory in fiscal year 2001? Refer to the "notes to statements".
- c. What is 3M's total common equity or net worth as of year-end 2001? Is this amount larger or smaller than in 2000?
- d. Look at 3M's consolidated statement of income, which appears before its balance sheet in the annual report. What was 3M's operating income in 2001? Did operating income increase in 2001 when compared against 2000?
- e. What was 3M's net income available to common stockholders for fiscal years 1999, 2000, and 2001?
- f. What was 3M's reported "basic" and "diluted" earnings per share in 2000 and 2001? What is the difference between basic and diluted earnings per share?
- g. Go to <http://finance.yahoo.com> and obtain a quote for the Minnesota Mining & Manufacturing (ticker: MMM) and look at the company's "Profile". What does Yahoo!Finance report as 3M's Cash and Income available to common? How do these values compare to 3M's annual report values for Cash and Net Income?
- h. Why might there be a discrepancy between 3M's annual report and Yahoo!Finance?

Ch 06-13 Build a Model					7/8/2002		
Chapter 6. Ch 06-13 Build a Model							
Here are the balance sheets as given in the problem:							
Cumberland Industries December 31 Balance Sheets							
(in thousands of dollars)							
			2003	2002			
Assets							
Cash and cash equivalents			\$91,450	\$74,625			
Short-term investments			\$11,400	\$15,100			
Accounts Receivable			\$103,365	\$85,527			
Inventories			\$38,444	\$34,982			
Total current assets			\$244,659	\$210,234			
Fixed assets			\$67,165	\$42,436			
Total assets			\$311,824	\$252,670			
Liabilities and equity							
Accounts payable			\$30,761	\$23,109			
Accruals			\$30,477	\$22,656			
Notes payable			\$16,717	\$14,217			
Total current liabilities			\$77,955	\$59,982			
Long-term debt			\$76,264	\$63,914			
Total liabilities			\$154,219	\$123,896			
Common stock			\$100,000	\$90,000			
Retained Earnings			\$57,605	\$38,774			
Total common equity			\$157,605	\$128,774			
Total liabilities and equity			\$311,824	\$252,670			
a. The company's sales for 2003 were \$455,150,000, and EBITDA was 15 percent of sales. Furthermore, depreciation amounted to 11 percent of net fixed assets, interest charges were \$8,575,000, the state-plus-federal corporate tax rate was 40 percent, and Cumberland pays 40 percent of its net income out in dividends. Given this information, construct Cumberland's 2003 income statement.							
The input information required for the problem is outlined in the "Key Input Data" section below. Using this data and the balance sheet above, we constructed the income statement shown below.							
Key Input Data for Cumberland Industries							
Sales Revenue			\$455,150				
EBITDA as a percent of sales			15%				
Depr. as a % of Fixed Assets			11%				
Tax rate			40%				
Interest Expense			\$8,575				
Dividend Payout Ratio			40%				
			2003	2002			
Sales				\$364,120			
Expenses excluding depreciation and amortization				\$321,109			
EBITDA				\$43,011			
Depreciation (Cumberland has no amortization charges)				\$6,752			
EBIT				\$36,259			
Interest Expense				\$7,829			
EBT				\$28,430			
Taxes (40%)				\$11,372			

Quiz 16: Problems

Name: Alan Eastman (Preview)

Start time: February 24, 2005 6:33pm

Number of questions: 17

[Finish](#)

[Help](#)

Question 1 (1 point)

The fact that 70 percent of intercorporate dividends received by a corporation is excluded from taxable income has encouraged debt financing over equity financing.

- a. True
- b. False

[Save answer](#)

Bottom of Form

Question 2 (1 point)

An individual with substantial personal wealth and income is considering the possibility of opening a new business. The business will have a relatively high degree of risk, and losses may be incurred for the first several years. Which legal form of business organization would probably be best?

- a. Corporation
- b. Proprietorship
- c. Partnership
- d. Limited partnership
- e. S corporation

[Save answer](#)

Bottom of Form

Question 3 (1 point)

Which of the following statements is most correct?

- a. In order to avoid double taxation and to escape the frequently higher tax rate applied to capital gains, stockholders generally prefer to have corporations pay dividends rather than to retain their earnings and reinvest the money in the business. Thus, earnings should be retained only if the firm needs capital very badly and would have difficulty raising it from external sources.
- b. Under our current tax laws, when investors pay taxes on their dividend income, they are being subjected to a form of double taxation. and if the tax laws stated that \$0.50 out of every \$1.00 of interest paid by a corporation was allowed as a tax-deductible expense, this

- would probably encourage companies to use more debt financing than they presently do, other things held constant are both correct.
- c. Under our current tax laws, when investors pay taxes on their dividend income, they are being subjected to a form of double taxation.
 - d. If the tax laws stated that \$0.50 out of every \$1.00 of interest paid by a corporation was allowed as a tax-deductible expense, this would probably encourage companies to use more debt financing than they presently do, other things held constant.
 - e. The fact that a percentage of the interest received by one corporation, which is paid by another corporation, is excluded from taxable income has encouraged firms to use more debt financing relative to equity financing.

[Save answer](#)

Bottom of Form

Question 4 (1 point)

Ryngaert & Sons, Inc. has operating income (EBIT) of \$2,250,000. The company's depreciation expense is \$450,000, its interest expense is \$120,000, and it faces a 40 percent tax rate. What is the company's net income?

- a. \$1,475,000
- b. \$1,800,000
- c. \$1,728,000
- d. \$1,008,000
- e. \$1,278,000

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Question 5 (1 point)

Ryngaert & Sons, Inc. has operating income (EBIT) of \$2,250,000. The company's depreciation expense is \$450,000, its interest expense is \$120,000, and it faces a 40 percent tax rate. What is its net cash flow?

- a. \$1,800,000
- b. \$1,278,000
- c. \$1,475,000
- d. \$1,008,000
- e. \$1,728,000

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Question 9 (1 point)

Assume that Carter's tax rate for all 4 years was a flat 15 percent; that is, each dollar of taxable income was taxed at 15 percent. In 2003, Carter incurred a loss of \$17,000. Using corporate loss carry-back, what is Carter's adjusted tax payment for 2002?

- a. \$450
- b. \$850
- c. \$610
- d. \$750
- e. \$550

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Question 10 (1 point)

A firm can undertake a new project that will generate a before-tax return of 20 percent or it can invest the same funds in the preferred stock of another company that yields 13 percent before taxes. If the only consideration is which alternative provides the highest relevant (after-tax) return and the applicable tax rate is 35 percent, should the firm invest in the project or the preferred stock?

- a. Preferred stock; its relevant return is 12 percent.
- b. Project; its relevant return is 1.36 percentage points higher.
- c. Project; its after-tax return is 20 percent.
- d. Either alternative can be chosen; they have the same relevant return.
- e. Preferred stock; its relevant return is 0.22 percentage points higher.

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Bottom of Form

Question 11 (1 point)

Cooley Corporation has \$20,000 that it plans to invest in marketable securities. It is choosing between MCI bonds which yield 10 percent, state of Colorado municipal bonds which yield 7 percent, and MCI preferred stock with a dividend yield of 8 percent. Cooley's corporate tax rate is 25 percent, and 70 percent of its dividends received are tax exempt. What is the after-tax rate of return on the highest yielding security?

- a. 6.5%
- b. 6.0%
- c. 7.5%
- d. 7.4%
- e. 7.0%

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Bottom of Form

Question 12 (1 point)

GPD Corporation has operating income (EBIT) of \$300,000, total assets of \$1,500,000, and its capital structure consists of 40 percent debt and 60 percent equity. Total assets were equal to total operating capital. The firm's after-tax cost of capital is 10.5 percent and its tax rate is 40 percent. The firm has 50,000 shares of common stock currently outstanding and the current price of a share of stock is \$27.00. What is the firm's Market Value Added (MVA)?

- a. \$22,500
- b. \$450,000
- c. \$575,000
- d. \$187,740
- e. \$87,575

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Bottom of Form

Question 13 (1 point)

GPD Corporation has operating income (EBIT) of \$300,000, total assets of \$1,500,000, and its capital structure consists of 40 percent debt and 60 percent equity. Total assets were equal to total operating capital. The firm's after-tax cost of capital is 10.5 percent and its tax rate is 40 percent. The firm has 50,000 shares of common stock currently outstanding and the current price of a share of stock is \$27.00. What is the firm's Economic Value Added (EVA)?

- a. \$87,575
- b. \$575,000
- c. \$22,500
- d. \$187,740
- e. \$450,000

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Question 6 (1 point)

Wayne Corporation had income from operations of \$385,000, it received interest payments of \$15,000, it paid interest of \$20,000, it received dividends from another corporation of \$10,000, and it paid \$40,000 in dividends to its common stockholders. What is Wayne's federal income tax?

- a. \$130,220
- b. \$122,760
- c. 155,200
- d. \$141,700
- e. \$163,500

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Bottom of Form

Question 7 (1 point)

A firm purchases \$10 million of corporate bonds that paid a 16 percent interest rate, or \$1.6 million in interest. If the firm's marginal tax rate is 35 percent, what is the after-tax interest yield?

- a. 10.40%
- b. 14.32%
- c. 7.36%
- d. 8.64%
- e. 13.89%

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Bottom of Form

Question 8 (1 point)

A firm purchases \$10 million of corporate bonds that paid a 16 percent interest rate, or \$1.6 million in interest. The firm's marginal tax rate is 35 percent. The firm also invests in the common stock of another company having a 16 percent before-tax dividend yield. What is the after-tax dividend yield?

- a. 7.36%
- b. 8.64%
- c. 10.40%
- d. 14.32%
- e. 13.89%

Bottom of Form

Question 14 (1 point)

Refer to Figure 6-1. What is the net operating profit after taxes (NOPAT) in millions of dollars for 2003?

- a. \$27
- b. \$45
- c. \$40
- d. \$18
- e. \$34

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Question 15 (1 point)

Refer to Figure 6-1. What is the net operating working capital in millions of dollars for 2003?

- a. \$58
- b. \$87
- c. \$38
- d. \$112
- e. \$54

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Bottom of Form

Question 16 (1 point)

Refer to Figure 6-1. What is the total operating capital in millions of dollars for 2003?

- a. \$177
- b. \$128
- c. \$90
- d. \$144

e. \$148

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Bottom of Form

Question 17 (1 point)

Refer to Figure 6-1. What is the free cash flow in millions of dollars for 2003?

a. \$16

b. \$25

c. \$27

d. \$20

e. \$11

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