

UWU CC - 11/13/01
Senate 1/29/02

01-34

Received
Nov. 12, 2001

Undergraduate Distance Education Review Form

(Required for all courses taught by distance education for more than one-third of teaching contact hours)

Existing and Special Topics Course

Course: FIN310 - FINANCE I

Instructor of Record: ROBERT BOLDRIN phone: (724) 357 2465 e-mail: RBOLDING@PUP.EDU

Step One: Attach signed Budget Approval Form to this form.

Step Two: 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 a qualified instructor 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] 12/15/01
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 Three: UNIVERSITY-WIDE UNDERGRADUATE CURRICULUM COMMITTEE

Positive recommendation

Negative recommendation

[Signature] 12/13/01
signature of committee chair date

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

Step Four: Provost

Approved as distance education course

Rejected as distance education course

[Signature] 12/13/01
signature of Provost date

Step Five:

Forward materials to Dean of the School of Continuing Education.

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

Finance I (FIN 310) -- Spring 2002

Undergraduate Distance Education Review Form

1) Will a qualified instructor teach the course?

Dr. Robert Boldin will be teaching the FIN 310 on-line course during the 2002 spring semester. Dr. Boldin has over 20 years of classroom experience teaching various undergraduate and graduate finance courses. He holds a PhD in business and applied economics from the Wharton School and has published numerous articles in refereed journals. For a more complete description of his background please refer to the professor information given in the syllabus.

2) Will the technology serve as a suitable substitute for the traditional classroom?

Typically this course is taught in a classroom setting. Because of the advancement in technology and familiarization of computer usage by individuals, it is now possible to offer this course on-line. In fact a number of courses are already offered online by IUP faculty, which indicates that the technology is available for this purpose.

3) Are there suitable opportunities for interaction between the instructor and the student?

The opportunity for interaction will be available through email, chat room and white board. In addition, office hours will be observed so that students can meet directly with the faculty as needed. The students will be required to take a number of quizzes so that the instructor can monitor progress. Also, two in-class exams and an in-class comprehensive final will be given during the semester. After each exam the student's score and an exam solution to problems and questions will be emailed to each student. Thus, students will have every opportunity to interact with the instructor and will be encouraged to do so. In addition, and perhaps most importantly, the instructor will periodically post a question on the bulletin board to which students can respond. This portion of the course is expected to encourage critical thinking and debate. The thrust and parry by the students and instructor should be an interesting and informational interaction, and enhance the overall teaching experience.

4) A. Will there be suitable methods used to evaluate student achievement?

As noted above students will be required to take weekly quizzes. In addition, the student will take two in-class exams and an in-class comprehensive final exam. Because of this examination structure, student progress and achievement can be easily monitored. Also their participation in responding to the posted questions will provide additional feedback for the evaluative process.

B. Have reasonable efforts been made to insure the integrity of evaluation methods (academic honesty)?

Students will have the opportunity to attempt each quiz up to three times. The final attempt will be considered for their final grade for that quiz. Since students can repeat the quiz, it is believed that the integrity of this evaluation method should be reasonably assured. Even if this is not the case, the in-class examinations will assure integrity. For these exams, each student will be required to present a valid I.D. and each student will be tested individually with regard to his or her level of comprehension and knowledge of the material.

course outline

Indiana University of Pennsylvania
Eberly College of Business and Information Technology
Department of Finance and Legal studies

Finance I (FIN 310) -- Spring 2002

Introduction:

Welcome to on-line Finance I (FIN 310). The on-line content and tools feature the most advanced educational technology and instructional design available today. The rich set of materials, communication tools, and course management resources have been incorporated into this course.

This introductory course on the Foundations of Finance explores the logic and practice of financial management. It involves the study of the methods of securing and managing funds on short, intermediate, and long-term bases. The financial analysis, planning, and control of a corporation. Also covered is working capital management. Other areas included are introduction to risk and return, capital markets and institutions, and security valuation. As the course develops, the student will begin to gain a conceptual understanding of the financial decision making process through current financial theory and data.

Professor Information:

Professor: Dr. Robert Boldin
Office: 322A Eberly College of Business and Technology
Phone: (724) 357 2465
Email: rboldin@iup.edu
Office Hours: TR 3:00 - 4:00 p.m. and W 1:30 - 4:30 p.m.; Other times by appointment.

Course Credits:

3 Credit Hours

Prerequisites:

ACCT 202, MATH 214 for business majors; ACCT 202, MATH 214 or MATH 217 for non-business majors (MATH 214 recommended).

"Beginning with the summer 2000 term, 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"

Text Book:

Foundations of Finance, 3rd edition, Prentice Hall, 2001.
Arthur J. Keown, J. William Petty, David F. Scott, Jr., and John D. Martin.

Suggested on-line class meeting time:

Tuesdays 10:15 - 11:45 p.m.

Course Overview

The course outline/syllabus contains information about the materials needed for the course, i.e. texts, calculators, web addresses, disks, etc. The course 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 you are responsible for completing the assignments as indicated in the schedule. The class does not meet synchronously so be sure to consult the calendar; I will not be reminding you of assignments that you are to complete. Time should be spent reading this course outline carefully and completing the assignments as required. Through e-mail or on the threaded bulletin board posting, I expect to be able to address your questions and concerns.

Course Objectives:

1. The student will be able to analyze and forecast financial statement, and understand their uses in making financial decisions.
2. The students will be able to apply valuation concepts to a wide range of assets, including securities, loans, and productive assets.
3. The students will be able to identify the characteristics of various securities and understand how their markets function.
4. The student will understand the roles of financial institutions, monetary policy, and interest rates in well-functioning markets.
5. The students will become familiar with the techniques of managing long-term and short-term assets and liabilities.
6. Students will be able to use data from on-line sites such as EDGAR, the SEC financial reporting database, and other sources of financial information to aid in financial decision making.

Assignments and projects:

Assignments are noted each week. I will post information about what is expected of you in order to successfully complete the course. For example, for this course I have indicated in the calendar the material to be completed before each exam. On-line participation (either through e-mail, the discussion board, or in chat) is expected, especially for the questions posted on the threaded bulletin.

Grading Procedures:

Please note the quizzes and the exams and their assigned points below:

QUIZZES AND EXAMS	POINTS POSSIBLE
Class Participation (On-Line)	50
Quizzes (On-Line)	100
Exam I (In-Class)	100
Exam II (In-Class)	100
Comprehensive Final Exam (In-Class)	150
TOTAL	500

CLASS PARTICIPATION will be based on the student's response to questions that will be posted periodically. These questions may be controversial in nature. Students can respond to the question itself as well as to comments made by others. QUIZZES will be taken on-line while EXAMS I and II will be taken in an assigned class room (time and location to be announced). The in-class COMPREHENSIVE FINAL will be taken during finals week (time and location to be announced). Exams will consist of multiple choice questions and problems, and/or short essay questions depending on the nature of the material in that section of the course. For each exam, students are permitted to use an 8.5" x 11" single page for notes (both sides). **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.**

The letter grade is determined using the grade distribution chart that follows. The grade percentage is found as follows (total points which a student obtains/500) * 100.

The percentage corresponds to a letter grade.

GRADE PERCENTAGE	CORRESPONDING GRADE
90-100	A
80-89	B
70-79	C
60-69	D
Below 60	F

Reminders:

- For the first class on Thursday, January 17th 2002, it is suggested that all students attend this information session (time and location to be announced).
- Additional readings, problems and cases may be assigned from time to time.
- Homework typically will not be collected unless otherwise indicated.
- You will have the opportunity to take each quiz up to three times. The score obtained in the last attempt will be graded and recorded as your quiz grade. Quizzes are required for each chapter.
- Your attendance is required for the two in-class exams and the in-class comprehensive final examination.
- For each exam, students are permitted to use an 8.5" x 11" single page for notes (both sides).
- Valid identification is required for taking in-class exams.
- After each in-class exam your score and answer key will be emailed to you for review.

Schedule:

WEEK 1

- Review course outline
- Review text
- Review Web-CT
- E-mail student biography to instructor with any concerns/questions about the course
- Reading Assignment - Chapters 1-2
- Homework - Chapters 1-2
Study Questions: 1-2, 1-5, 1-6, 1-9, 2-3, 2-7, 2-15, 2-18.
Study Problems: 1-1, 1-4, 1-9, 2-2, 2-4.
- Quiz - Chapter 1-2

WEEK 2

- Reading Assignment - Chapters 3
- Homework - Chapters 3
Study Questions: 3-1, 3-2, 3-3, 3-4, 3-6.
Study Problems: 3-2, 3-3, 3-5.
- Quiz - Chapter 3

WEEK 3

- Reading Assignment - Chapters 4
- Homework - Chapters 4
Study Questions: 4-1, 4-3, 4-5, 4-7.
Study Problems: 4-2, 4-5, 4-7, 4-8.
- Quiz - Chapter 4

WEEK 4

- Reading Assignment - Chapters 5-6
- Homework - Chapters 5-6
Study Questions: 5-2, 5-4, 5-7, 6-4, 6-6.
Study Problems: 5-3, 5-4, 5-5, 5-6, 6-2, 6-3, 6-5, 6-6, 6-10, 6-12, 6-13.
- Quiz - Chapter 5-6

WEEK 5

- Exam I (in-class): Covering Chapters 1-6, 2/14/2002, Thursday (time and location to be announced).

WEEK 6

- Reading Assignment - Chapters 7
- Homework - Chapters 7
Study Questions: 7-1, 7-5, 7-6.
Study Problems: 7-2, 7-5, 7-7.
- Quiz - Chapter 7

WEEK 7

- Reading Assignment - Chapters 8
- Homework - Chapters 8
Study Questions: 8-1, 8-4, 8-7.
Study Problems: 8-3, 8-5, 8-6, 8-9, 8-12, 8-14.
- Quiz - Chapter 8

WEEK 8

- Reading Assignment - Chapters 9

- Homework - Chapters 9
Study Questions: 9-2, 9-3, 9-8.
Study Problems: 9-2, 9-4, 9-7, 9-9.
- Quiz - Chapter 9

WEEK 9

- Reading Assignment - Chapters 10
- Homework - Chapters 10
Study Questions: 10-1, 10-4, 10-5.
Study Problems: 10-3, 10-5, 10-13, 10-14.
- Quiz - Chapter 10

WEEK 10

- Reading Assignment - Chapters 11-12
- Homework - Chapters 11-12
Study Questions: 11-1, 11-2, 12-4.
Study Problems: 11-2, 11-4, 12-2, 12-12.
- Quiz - Chapter 11-12

WEEK 11

- Exam II (in-class): Covering Chapter 7-12, 4/4/2002, Thursday, (time and location to be announced).

WEEK 12

- Reading Assignment - Chapters 13-14
- Homework - Chapters 13-14
Study Questions: 13-2, 13-3, 13-8, 13-18, 14-1, 14-6, 14-7, 14-11, 14-12, 14-13.
Study Problems: 13-2, 13-4, 13-5, 14-3, 14-4, 14-6.
- Quiz - Chapter 13-14

WEEK 13

- Reading Assignment - Chapters 15
- Homework - Chapters 15

Study Questions: 15-1, 15-3, 15-13.
Study Problems: 15-1, 15-2, 15-3, 15-5, 15-8.

- Quiz - Chapter 15

WEEK 14

- Reading Assignment - Chapters 16
- Homework - Chapters 16
Study Questions: 16-7, 16-11, 16-15.
Study Problems: 16-1, 16-3, 16-12, 16-14.
- Quiz - Chapter 16

WEEK 15

- Reading Assignment - Chapters 17
- Homework - Chapters 17
Study Questions: 17-1, 17-6, 17-10, 17-15.
Study Problems: 17-1, 17-2, 17-3, 17-4, 17-5, 17-6.
- Quiz - Chapter 17

The in-class comprehensive final exam will be held during finals week. Date, time and location will be announced.

[Click the Close button to return to the Syllabus.](#)

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professor info

Indiana University of Pennsylvania
Eberly College of Business and Information Technology
Department of Finance and Legal studies

Finance I (FIN 310)

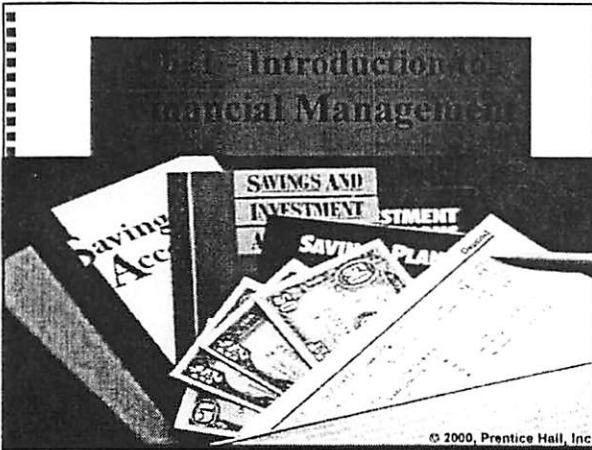
Dr. Robert Boldin

Since 1978 Dr. Robert Boldin has taught finance at Indiana University of Pennsylvania and served as the first department chairman of the Finance/MIS Department. He has also served as chair of the Department of Finance and Legal studies. Additionally, he is the Co-Chair of the Management Services Group at IUP, a program designed to provide comprehensive management and technical assistance to the small business community; he also serves as manager of the Indiana County Small Business Incubator. Before joining IUP, he was Assistant to the Treasurer at Carnegie-Mellon University, and held a faculty position at both Clarkson University and Franklin and Marshall College. He was invited by the World Bank to serve as lecturer and consultant to Northern Jiaotong University in Beijing, China for a one month period, and he has traveled to Yugoslavia as a consultant for Brackenridge, Inc., a company which manages small business initiatives world wide. He has done consulting work for Martin Marietta as well as numerous smaller firms and organizations.

Professor Boldin holds a Ph.D. and an MA in Business and Applied Economics from the University of Pennsylvania's Wharton School. He received an MBA from Duquesne University and earned a B.S. in Chemical Engineering from the University of Pittsburgh.

Dr. Boldin is active in research and has co-authored a number of articles dealing with banking and finance. His current research is focused on emerging stock markets. During his tenure at IUP he has received various research grants, has twice been named Research Associate for the College of Business and twice has been awarded a sabbatical based on strength of research proposal. He is involved in various Finance conferences serving as chairperson of sessions as well as discussant for papers in areas which include firm valuation and international finance. He has reviewed a number of texts in the finance/investments fields. His articles have appeared in *Financial Management*, *Review of Research in Banking and Finance*, *Financial Executive*, *The Bankers Magazine*, *New England Journal of Business and Economics*, *Journal of Economics and Finance*, *Financial Service Review*, and *Midwest Review of Finance and Insurance*.

Dr. Boldin served a two-year term as a board member of the Pittsburgh Chapter of Financial Executives Institute. He has served two four-year terms as an elected council member for the borough of Aspinwall in Pittsburgh and served four years as president. He is a past board member of the Pittsburgh Children's Festival Chorus. In addition, he completed a three-year term as vice president of the Academy of Financial Services and served as the first Secretary-Treasurer of the International Academy of Business Disciplines.



Goal of the Firm
Profit Maximization

this goal ignores:

- a) **TIMING** of Returns
(Time Value of Money - Ch. 6)
- b) **UNCERTAINTY** of Returns
(Risk - Ch. 7)

Maximizing Firm Value
Maximizing Stock Price

this is the same as:

- a) **Maximizing Firm Value**
- b) **Maximizing Stock Price**

Business Organization

- 1) **Sole Proprietorship**
 - A business owned by a single individual.
 - Owner maintains title to the firm's assets.
 - Owner has unlimited liability.
- 2) **Partnership**
 - Similar to a sole proprietorship, except that there are two or more owners.

Legal Forms of Business

2a) General Partnership

- All partners have unlimited liability.

2b) Limited Partnership

- Consists of one or more general partners, who have unlimited liability, and
- One or more limited partners (investors) whose liability is limited to the amount of their investment in the business.

Legal Forms of Business

3) Corporation

- A business entity that legally functions separate and apart from its owners.
- Owners' liability is limited to the amount of their investment in the firm.
- Owners hold common stock certificates, and ownership can be transferred by selling the certificates.

Corporate Income Tax Rates
Since 1993

Taxable Income	Corporate Tax Rate
\$1 - \$50,000	15%
\$50,001 - \$75,000	25%
\$75,001 - \$10 million	34%
over \$10 million	35%
and	
\$100,000 - \$335,000	5% surtax
\$15m - \$18.333 m	3% surtax

Legal Forms of Business

- 4 important considerations:

Dividend Income Tax

- 4 important considerations:
 - ◆ dividend income -

Corporate Income Tax

- 4 important considerations:
 - ◆ dividend income - 70% is exempt from federal taxation.

Dividend Income Tax

- 4 important considerations:
 - ◆ dividend income - 70% is exempt from federal taxation.
 - ◆ Net operating losses -

Corporate Income Tax

- 4 important considerations:
 - ◆ dividend income - 70% is exempt from federal taxation.
 - ◆ Net operating losses - may be carried back 2 years or forward up to 20 years.

Corporate Income 13.4

■ 4 important considerations:

- ◆ dividend income - 70% is exempt from federal taxation.
- ◆ Net operating losses - may be carried back 2 years or forward up to 20 years.
- ◆ Net capital gains -

Corporate Income 13.4

■ 4 important considerations:

- ◆ dividend income - 70% is exempt from federal taxation.
- ◆ Net operating losses - may be carried back 2 years or forward up to 20 years.
- ◆ Net capital gains - taxed as ordinary income.

Corporate Income 13.4

■ 4 important considerations:

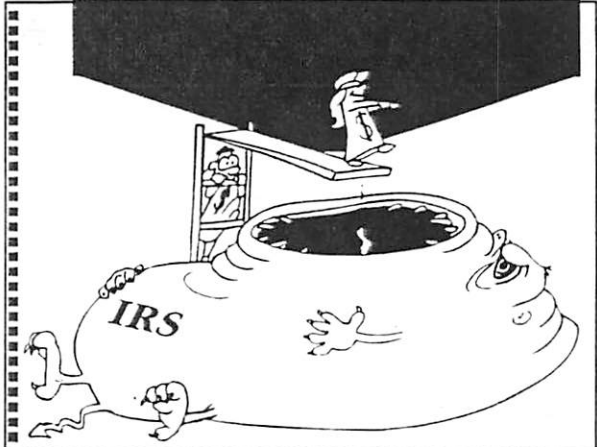
- ◆ dividend income - 70% is exempt from federal taxation.
- ◆ Net operating losses - may be carried back 2 years or forward up to 20 years.
- ◆ Net capital gains - taxed as ordinary income.
- ◆ Net capital losses -

Corporate Income 13.4

■ 4 important considerations:

- ◆ dividend income - 70% is exempt from federal taxation.
- ◆ Net operating losses - may be carried back 2 years or forward up to 20 years.
- ◆ Net capital gains - taxed as ordinary income.
- ◆ Net capital losses - may be carried back 3 years or forward up to 5 years and applied against net capital gains.

- Financial Management Questions**
- 1) Risk
 - 2) Time value of money
 - 3) Cash is king
 - 4) Incremental cash flows count
 - 5) It's hard to find really profitable projects
 - 6) Efficient capital markets
 - 7) The agency problem
 - 8) Taxes bias business decisions
 - 9) All risk is not equal
 - 10) Ethical dilemmas are everywhere in finance



- Space Cow Computer has sales of \$32 million, cost of goods sold at 60% of sales, cash operating expenses of \$2.4 million, and \$1.4 million in depreciation expense. The firm received \$400,000 in dividend income, and has \$12 million in 9.5% bonds outstanding. The firm will pay \$500,000 in dividends to its common stock holders.
- Calculate the firm's tax liability.

Sales		\$32,000,000
Cost of Goods Sold		(19,200,000)
Operating Expenses		(2,400,000)
Depreciation Expense		<u>(1,400,000)</u>
EBIT or NOI		9,000,000
Dividend Income	\$400,000	
less 70%	<u>(280,000)</u>	120,000
Interest Expense		<u>(1,140,000)</u>
Taxable Income		7,980,000

<u>Income</u>	<u>tax rate</u>	<u>tax payment</u>
\$50,000	x .15	= \$ 7,500
\$25,000	x .25	= 6,250
\$7,905,000	x .34	= 2,687,700
<i>surtax:</i>		
\$235,000	x .05	= <u>11,750</u>
Total Tax payment		\$2,713,200
<i>short cut: \$7,980,000 x .34 = \$2,713,200</i>		

■ Barn Yard Brewery has sales of \$40 million, cost of goods sold of \$19.5 million, cash operating expenses of \$3 million, and \$1 million in depreciation expense. The firm received \$50,000 in dividend income. Also, the firm sold 5,000 shares of AT&T stock for \$76 that it had purchased for \$55 four years ago, and sold property for \$4 million that originally cost the firm \$3.5 million.

■ Calculate the firm's tax liability.

Sales	\$40,000,000
Cost of Goods Sold	(19,500,000)
Deprec. & Operating Expenses	<u>(4,000,000)</u>
EBIT or NOI	16,500,000
Dividend Income	50,000
less 70%	(35,000)
	<u>15,000</u>
Ordinary Income	\$16,515,000
Capital Gains:	
stock: 5,000 (\$76-\$55)	105,000
property: \$4m - \$3.5m	<u>500,000</u>
Taxable Income	\$17,120,000

<u>Income</u>	<u>tax rate</u>	<u>tax payment</u>
\$50,000	x .15	= \$ 7,500
\$25,000	x .25	= 6,250
\$9,925,000	x .34	= 3,374,500
\$7,120,000	x .35	= 2,492,000
<i>surtaxes:</i>		
\$235,000	x .05	= 11,750
\$2,120,000	x .03	= <u>63,600</u>
Total taxes paid:		\$5,955,600

<u>Income</u>	<u>tax rate</u>	=	<u>tax payment</u>
\$10,000,000	x .34	=	3,400,000
\$7,120,000	x .35	=	2,492,000
<i>surtax:</i>			
\$2,120,000	x .03	=	<u>63,600</u>
Total taxes paid:			\$5,955,600

■ Last year, Seaside Corporation had sales of \$50 million. The firm's cost of goods sold amounted to 44% of sales, and cash operating expenses amounted to 14% of sales. Seaside has \$17.5 million in equipment that it will depreciate using simplified straight line over the next 7 years. Seaside sold 10,000 shares of IBM stock for \$110 per share that it had purchased earlier for \$90 a share. Unfortunately, the firm also sold property for \$3.5 million that it had bought years earlier for \$4 million. Seaside received \$80,000 in common stock dividend income, and paid \$120,000 in cash dividends to its own shareholders. Seaside has \$6.55 million in 8% coupon bonds outstanding. Calculate the firm's tax liability.

Sales		\$50,000,000
Cost of Goods Sold		(22,000,000)
Operating Expenses		(7,000,000)
Depreciation Expense		<u>(2,500,000)</u>
EBIT or NOI		18,500,000
Dividend Income	\$80,000	
less 70%	<u>(56,000)</u>	24,000
Interest Expense		<u>(524,000)</u>
Taxable Income		18,000,000

<u>Income</u>	<u>tax rate</u>	=	<u>tax payment</u>
\$50,000	x .15	=	\$ 7,500
\$25,000	x .25	=	6,250
\$9,925,000	x .34	=	3,374,500
<i>surtax:</i>			
\$235,000	x .05	=	11,750
\$8,000,000	x .35	=	2,800,000
<i>surtax:</i>			
\$3,000,000	x .05	=	<u>90,000</u>
Total Tax payment			\$6,290,000

Short cut:

<u>Income</u>	<u>tax rate</u>	<u>tax payment</u>
\$10,000,000	x .34	= \$3,400,000
\$8,000,000	x .35	= 2,800,000
<i>surtax:</i>		
\$3,000,000	x .05	= <u>90,000</u>
Total Tax payment		\$6,290,000

lecture objectives

CHAPTER 1: An Introduction to the Foundations of Financial Management—The Ties That Bind

This lecture explores the foundations of financial management. We'll look at the goal of the firm, possible organizational structures, and at corporate taxes. We'll also lay out ten axioms for sound financial management. After reading this lecture, you will be able to answer the following questions.

1. **Why is stockholder wealth maximization considered a better goal for the firm than profit maximization?**
2. **What are the three forms of business organizations?**
3. **What are the advantages and disadvantages of each business structure?**
4. **If you were the CFO of a large corporation, how would you calculate your corporation's income tax liability?**
5. **What are the ten axioms of financial management?**

Page 1

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lecture notes

CHAPTER 1: An Introduction to the Foundations of Financial Management—The Ties That Bind

To take the Readiness Assessment Quiz, click on the "Quiz" icon on the button bar on the left of the screen.

Click the "next" icon on the button bar at the side of the screen to begin the lecture.

Lecture Notes Continue

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lecture notes

CHAPTER 1: An Introduction to the Foundations of Financial Management—The Ties That Bind

Goal of the Firm

Congratulations! You've been selected as the Chief Financial Officer (CFO) of a brand new firm. It's not going to be easy, but you think you and your company have what it takes to succeed. But before you get started, you need to focus on some basic questions.

Profit maximization

So let's start at the beginning. What is the goal of your firm? Your first answer might be that the goal of the firm is to maximize profits. This makes intuitive sense. Firms exist to make money. Therefore, the goal of the firm should be to try to make as much money as it legally can.

There are, however, some problems with this answer. First, it ignores the important role of risk in financial decision making. A project that promises the maximum potential profit may involve considerably more risk than a project with more modest potential returns. For instance, should the company put all its resources into a project with a 50% potential return on investment, but only a 1% chance of paying off? Or, should it invest in a project with a 15% potential return on investment and a 95% chance of paying off?

Second, the answer fails to take into account the issue of timing. When should profit be maximized, over the next two months, the next two years, or the next two decades? A company that sold many assets, cut its work force in half, and curtailed new product development could produce a very attractive *looking* short-run bottom line. But would these actions necessarily be in the company's best interests?

Maximization of shareholder wealth

Here's a better answer to our question. The goal of the firm is the maximization of shareholder wealth, that is to say, the maximization of the market value of existing shareholder's common stock.

Why is this a better answer? Think about it this way. When a potential investor evaluates a stock, he or she takes as many factors into account as possible. The firm's assets and liabilities, its track record, its market position, its future potential, and the attractiveness of its current projects are among the factors considered. In other words, the investor considers the risk/reward relationship embodied by the firm in the long and the short run. Therefore, both risk and timing are incorporated in the investor's decision making process. As a result, if we focus our firm on the goal of maximizing shareholder wealth, we'll include the key elements of risk and timing in our own decision making as well.

Legal Forms of Business Organization

Ok. We know what your firm's trying to do. Now we need to pick a legal form that will help you achieve this goal.

Sole proprietorship

Some businesses are operated as **sole proprietorships**. In such companies, a single owner is entitled to all profits from the business and is personally responsible for all liabilities the company incurs. A sole proprietorship is the simplest business form. In most cases, simply opening for business is enough to establish a sole proprietorship.

Partnership

A **partnership** has a lot in common with a sole proprietorship, the difference being that a partnership has more than one owner. There are two kinds of partnerships.

General partnership

In a **general partnership**, each partner is fully responsible for the liabilities incurred by the partnership. The exact relationship among the partners is set down in the partnership agreement.

Limited partnership

In a **limited partnership**, one or more of the partners has limited liability, restricted to the amount of capital invested in the partnership. There are some restrictions on limited partnerships. First, the partnership must include at least one general partner for whom the privilege of limited liability does not apply. Second, the limited partners cannot participate in the management of the business.

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Legal Forms of Business Organization (cont.)

Corporation

A **corporation** is the most complex business form. It is a legal entity, functioning separate and apart from its owners. What does this mean? First and foremost, it means that a corporation can sue and be sued, but its owners are not personally responsible for liabilities incurred by the corporation.

Here are two examples of how this works.

1. You own stock in an oil company. The government discovers that the oil company is violating certain environmental laws and orders the company to pay a large fine. The company must pay the fine, but you, as an owner of the company are not personally liable.
2. You own stock in an Internet company. The company racks up considerable debt, and then goes out of business. Creditors can sue the company, but they cannot sue you personally for their losses.

Despite this legal separation of the corporation and its owners, the owners still determine the direction and policies of the corporation. The owners select a board of directors who, in turn, select corporate officers. So, in theory, the owners control the corporation by controlling the selection of key personnel within the corporation.

Comparison of organizational forms

Each of these business forms has advantages and disadvantages. If you were opening a small retail store you might choose to operate as a sole proprietorship, taking advantage of the sole proprietorship's legal simplicity. If you and your friends wanted to start a business together you might form a general partnership, setting down the exact nature of your business relationship in a partnership agreement. In fact, most small businesses are sole proprietorships or partnerships.

Why large and growing firms choose the corporate form: Ease in raising capital

However, if you were starting a large company, one that you hoped would continue to grow in the future, you would probably choose to operate as a corporation. Why? The reason is because corporations are ideal vehicles for raising new capital. As your company grows, you'll need money to launch new ventures, to research new products, and to enter new markets. Transferability of ownership and limits on owner liability make it possible for corporations to attract a large pool of investors, each contributing a portion of the capital the corporation needs to carry out its plans.

The role of the financial manager in a corporation

As CFO, you'll play a key role in the corporation. Figure 1-1 of Keown, Martin, Petty, and Scott, *Foundations of Finance*, 3/e, *How the Finance Area Fits into a Corporation*, will provide a better understanding of the role of the financial manager in a corporation.

You'll serve under the Chief Executive Officer (CEO) and be responsible for financial planning, corporate strategic planning, and managing cash flow. The Treasurer and the Controller will report to you. The Treasurer will manage the company's financial dealings (cash and credit management, capital expenditure decisions, raising funds, etc.) and the Controller will manage the company's accounting (the production of financial statements, cost accounting, taxes, etc.).

Federal Income Taxation

Every decision you make as CFO will have to take into account the tax environment. As CFO, you'll find yourself constantly asking the following questions. What are the tax implications of our actions, and how can we minimize our tax liability?

Objectives of income taxation

The government uses taxation to achieve a number of goals. Obviously, the government uses taxation to generate income for government expenditure. It also uses taxation to promote particular behavior on the part of individuals and organizations. For example, the government might offer tax incentives to companies that undertake certain technological research, hire employees who come from economically disadvantaged groups, or locate their operations in economically depressed areas. In each case, the government's goal is to make a socially advantageous action economically attractive. As a CFO you need know about such provisions in the tax code. Otherwise, you might not be able to determine the true costs and benefits associated with your decisions.

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Federal Income Taxation (cont.)

Types of tax payers

There are three basic kinds of taxable entities: Individuals, fiduciaries (estates, trusts, etc.), and corporations. Individuals pay taxes on their income. Fiduciaries pay taxes on the income they generate that has not been distributed to a beneficiary. A corporation reports its income and pays taxes related to its profits. Its owners, however, only pay taxes on the corporation's profits when all or part of those profits are distributed as dividends.

As a CFO, you'll be concerned with corporate taxation, so that's what we'll focus on in the discussion that follows.

Computing taxable income

So how are corporations taxed? The **taxable income** for a corporation is based on the **gross income** from all sources, except for **allowable exclusions**, less any **tax-deductible expenses**.

Let's break this down. Gross income equals the firm's sales from its products or services less the cost of producing or acquiring them. So if a company receives \$10 million for its finished products and spends \$8 million to produce them, its gross income is \$2 million. Tax-deductible expenses include operating expenses, such as marketing expenses and administrative expenses, as well as interest paid on the corporation's outstanding debt.

Computing the taxes owed

Now let's look at corporate tax rates as depicted in table 1-2 of Keown, Martin, Petty, and Scott, *Foundations of Finance*, 3/e.

What's really important to understand here is that corporate tax rates are **marginal tax rates** or rates applied to the next dollar of income. Here's how it works. Let's say your company earns \$20 million in taxable income in a given year. The company's tax liability would break down like this:

\$50,000	x	15% =	\$7,500
\$25,000	x	25% =	\$6,250
\$9,925,000	x	34% =	\$3,374,500
\$10,000,000	x	35% =	\$3,500,000
			\$6,874,500

Additional surtaxes:

\$235,000	x	5% =	\$11,750
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$$\$3,333.333 \quad \times \quad 3\% = \quad \$100,000$$

Total tax liability: \$6,986.250



Try it now to test your understanding!

Try It!

Other tax considerations

The tax code is incredibly complicated and constantly changing. As a result, it would be impossible for us to go over all of the details of the code that might be important to you as a financial manager. However, we can highlight some key features for you to keep in mind.

Dividend exclusion

Corporations can normally exclude 70% of dividends received from other corporations. This means that if your company owned stock in another corporation and received \$1 million in dividends, it would pay tax on only \$300,000 of that income.

Depreciation

Depreciation is the means by which an asset's value is expensed over its useful life for federal tax purposes. There are three methods for computing depreciation: straight-line depreciation, the double-declining balance method, and the modified accelerated cost recovery system. Many firms use this last method because it allows them to take the depreciation sooner rather than later, essentially deferring the taxes until later.

Capital gains and losses

Capital gains (or losses) is defined as the gains or losses from the sale of assets not bought or sold in the ordinary course of business. Capital gains are, in most cases, taxed like ordinary income. Capital losses cannot be deducted, but they can be carried back three years and, if necessary, carried forward five years to offset capital gains accumulated over that period.

Other tax concerns

The government wants companies to stay in business. After all, bankrupt companies mean the loss of jobs and the creation of economic instability. To help struggling companies stay afloat, the government allows companies to carry back net operating losses two years or forward twenty years to offset profits. The hope is, by reducing a troubled company's tax liability, the government will assist its movement back to profitability.



Try it now to test your understanding!

Try It!

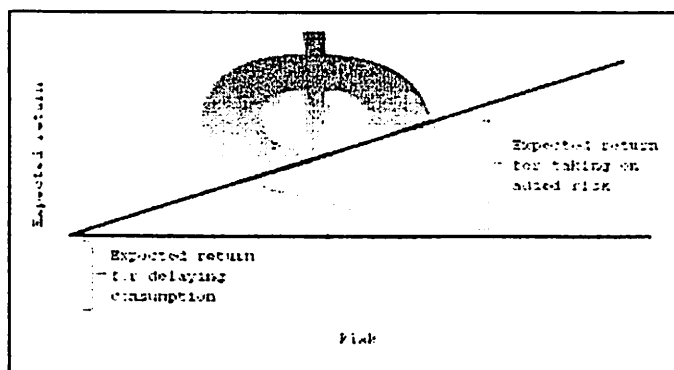
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Ten Axioms that Form the Foundations of Financial Management

We'll finish this introductory lecture by going over ten axioms of financial management. As we move through this course, we'll return to these axioms again and again. So what follows is, in a sense, a quick preview of things to come.

Axiom 1: The risk-return trade-off—We won't take on additional risk unless we expect to be compensated with additional return

As a financial manager, your job will revolve around risk-return trade-offs. How much risk does a project entail? How big a return might we get on our investment? Does the potential return justify the level of risk?



If someone asks you to take on additional risk without offering additional return, they're asking you to give something for nothing.

Axiom 2: The time value of money—A dollar received today is worth more than a dollar received in the future

Compare the value of a dollar received today with a dollar received five years from now. A dollar received today can be invested. A dollar received five years from now cannot. So a dollar received now exceeds the value of a dollar received five years from now by the return on investment we expect to receive over a five year period.

Axiom 3: Cash—not profits—is king

Future profits cannot be invested. They cannot be paid to shareholders in the form of dividends. In contrast, cash can be used immediately to forward the goals of the firm. That is why cash, not profit, in hand is king.

Axiom 4: Incremental cash flows—It's only what changes that counts

Every time you make a decision, you face two possible outcomes. What happens if you say yes? What happens if you no? The **incremental cash flow** is the difference between the company's cash flow if a project is taken on versus the cash flow if the project is rejected. This difference represents the true impact of the decision.

Axiom 5: The curse of competitive markets—Why it's hard to find exceptionally profitable projects

You're a financial manager. You identify a promising market that has not been exploited by your competitors. You recommend that your company enter the market. As expected, the market proves exceptionally lucrative.

Unfortunately, that's not the end of the story. Your competitors notice your success. They enter the market, pushing supply up and prices down. Now you have to invest in extensive advertising just to maintain your market share. What had been an exceptionally profitable project is now only an average performer.

How do you avoid this outcome?

You can try to differentiate your product in some key way that insulates you from competition. If your product is better in a way that cannot be easily copied, you might be able to maintain your pre-competition price.

You could also try to achieve a lasting cost advantage over the competition. If you can make your product for less, you can maintain your pre-competition profit margin.

Axiom 6: Efficient capital markets—The markets are quick and the prices are right

In an **inefficient** market the flow of information is slow and uneven. Stock prices in such markets are heavily influenced by the efforts of investors to take advantage of information discrepancies. In contrast, an **efficient** market is one in which the value of all assets and securities at any instant in time fully reflect all available information. In efficient markets, given enough time, good decisions will result in higher prices for our stock and bad decisions will result in lower prices for our stock.

Axiom 7: The agency problem—Managers won't work for the owners unless it's in their best interest

Your goal is to do everything you can to help the firm maximize shareholder value. At least that's what you tell people at work. Actually, your goal is maximize your own wealth. Maximizing shareholder wealth is just a means to an end. This discrepancy between the firm's goal and the goals of its managers is called the **agency problem**. Many firms try to overcome the agency problem by tying the financial compensation of managers to the achievement of the firm's goals.

Axiom 8: Taxes bias business decisions

Part of your job is to weigh the costs and benefits associated with particular decisions. The government uses this fact to shape business behavior. For example, if the government wanted businesses to start recycling programs, it might offer a tax credit to organizations that do so. On the other hand, if it wanted

- Axiom 5: The curse of competitive markets—why it's hard to find exceptionally profitable projects
- Axiom 6: Efficient capital markets—the markets are quick and the prices are right
- Axiom 7: The agency problem—managers won't work for the owners unless it's in their best interest
- Axiom 8: Taxes bias business decisions
- Axiom 9: All risk is not equal—some risk can be diversified away, and some cannot
- Axiom 10: Ethical behavior is doing the right thing, and ethical dilemmas are everywhere in finance

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lecture homework

CHAPTER 1: An Introduction to the Foundations of Financial Management—The Ties That Bind

1. Compare and contrast the goals of profit maximization and maximization of shareholder wealth.
2. Firms often involve themselves in projects that do not result directly in profits. As an example, IBM and Mobil Oil frequently support public television broadcasts. Do these projects contradict the goal of maximization of shareholder wealth? Why or why not?
3. Using the following criteria, specify the legal form of business that is favored:
 - organizational requirements and costs.
 - liability of the owners.
 - continuity of business.
 - transferability of ownership.
 - management control and regulations.
 - ability to raise capital.

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