LESSON 14: INTRODUCTION TO FINANCE

Focus Question: How do businesses finance their operations?

Objectives

Students will be able to:

- Compare and contrast short-, intermediate-, and long-term financing.
- Discuss the connection between personal saving and financing for business.
- Analyze the yield curve and explain what it tells us about the cost of short-, intermediate-, and long-term financing.
- Examine what the yield curve reveals about the future direction of the economy.

Standards

NES: 10, 12, 14, 15
ELA: 1, 2, 3

Time Frame/Notes to Teacher

One day, double period

Materials

- Textbook chapter on: Financing a Business.
- To be assigned for homework: *The World is Flat* by Thomas L. Friedman;
  Chapters:
  — "America and Free Trade"
  — "The Great Sorting Out," Sections: Section 1 (Untitled) and "Where Do Companies Stop and Start?"
  — "The Dell Theory of Conflict Prevention, Old-Time Versus Just-in-Time"

Teaching Strategies

I. Obtaining Financing

Review homework (Worksheet 14A, "Obtaining Financing.") As part of the whole-class discussion, have students explain their answers to the following:
— What did you learn about business financing from this exercise?
— Describe the kinds of short-term and long-term financing.

II. Financing Chart

Distribute Worksheet 14B, "Financing Chart." Have students complete the exercise on the worksheet. Then have them explain their answers to the following:
— In your own words, explain the chart.
— What does this chart tell us about how businesses like our VE business obtain money for financing?
— Based on what we learn from the chart, should we be concerned that Americans have one of the lowest savings rates in their history?

III. Yield Curve: The Cost of Financing Over Time

Distribute Worksheet 14C, "Yield Curve: The Cost of Financing Over Time." Have students complete the exercise on the worksheet. Then have them explain their answers to the following:
— What do we learn about the costs of borrowing over different periods of time from this chart?
— How can you explain why it costs more to borrow for longer periods of time than shorter periods?
— Under what conditions would interest rates be higher for shorter than longer periods of time?

IV. Yield Curve: Signs for the Economy

Distribute Worksheet 14D, "Yield Curve: Signs for the Economy." Have students complete the exercise on the worksheet. Then, as part of the whole-class discussion, have the class explain their answers to the following:

— What do we learn about the yield curve from this worksheet?
— How does this worksheet explain how the shape of the yield curve indicates the future direction of the economy?
— Based on the shape of the yield curve today, in what direction do you think the economy is going?
— How might what we learn about the yield curve on this worksheet help us in running our VE business?

Summary/Assessment

Describe how your personal spending and saving contribute to the circular flow of economic activity.

Homework

- Read materials in preparation for Lesson 15.
- Assign questions for homework.
- Distribute for completion as homework: Worksheets 15A, 15B, and 15C. These worksheets correspond to specific chapters in *The World is Flat.*

Worksheet 14A

Financing the Enterprise

Generally speaking, a company wants to obtain money at the lowest cost and least amount of risk. However, lenders and investors want to receive the highest possible return on their investment, also at the lowest risk. Thus, there is a tension between those who want to obtain cash for their business and those who may be willing to provide cash that businesses require.

What options are available to a company that needs to raise cash to finance operations?

TYPE	DESCRIPTION	ADVANTAGES/DISADVANTAGES
Internal financing	• Companies use excess cash to finance growth.	• Not an option for new companies. • No interest payments are required. • Ownership of company is not sacrificed.
Short-term debt financing	• Loans that will be repaid within a year. • Money borrowed for purchases of things that will be used up in the short term (less than one year). • Trade credit from suppliers allowing purchasers to obtain products before paying for them.	• Not easy for new firms to qualify for loans unless they have something of value (collateral) lender can claim. • Loans are paid off once borrowing needs have been met. • Trade credits are often interest-free loans that suppliers offer to develop business relationship with new customers.
Long-term debt financing	• Loans that are repaid in a period longer than one year. Appropriate to finance long-term projects and property and equipment with a useful life longer than one year. • **Leasing** is a way for a company to use an item long term in exchange for regular payments. • Large companies (and governments) issue **bonds** when the amount borrowed is too large for a single source to provide.	• Very few companies have the ability to finance long-term projects internally. Long term debt allows companies to undertake major projects. • By leasing, firms with less than excellent credit still have access to expensive equipment — the lessor can repossess equipment it still legally owns. • Bonds are a way to raise very large amounts of funds.
Equity financing	• Selling shares of stock to a private investor (private equity financing) or to the public (public equity financing).	• Companies are able to raise funds without having to pay interest from borrowing. • Ownership control may be lost.

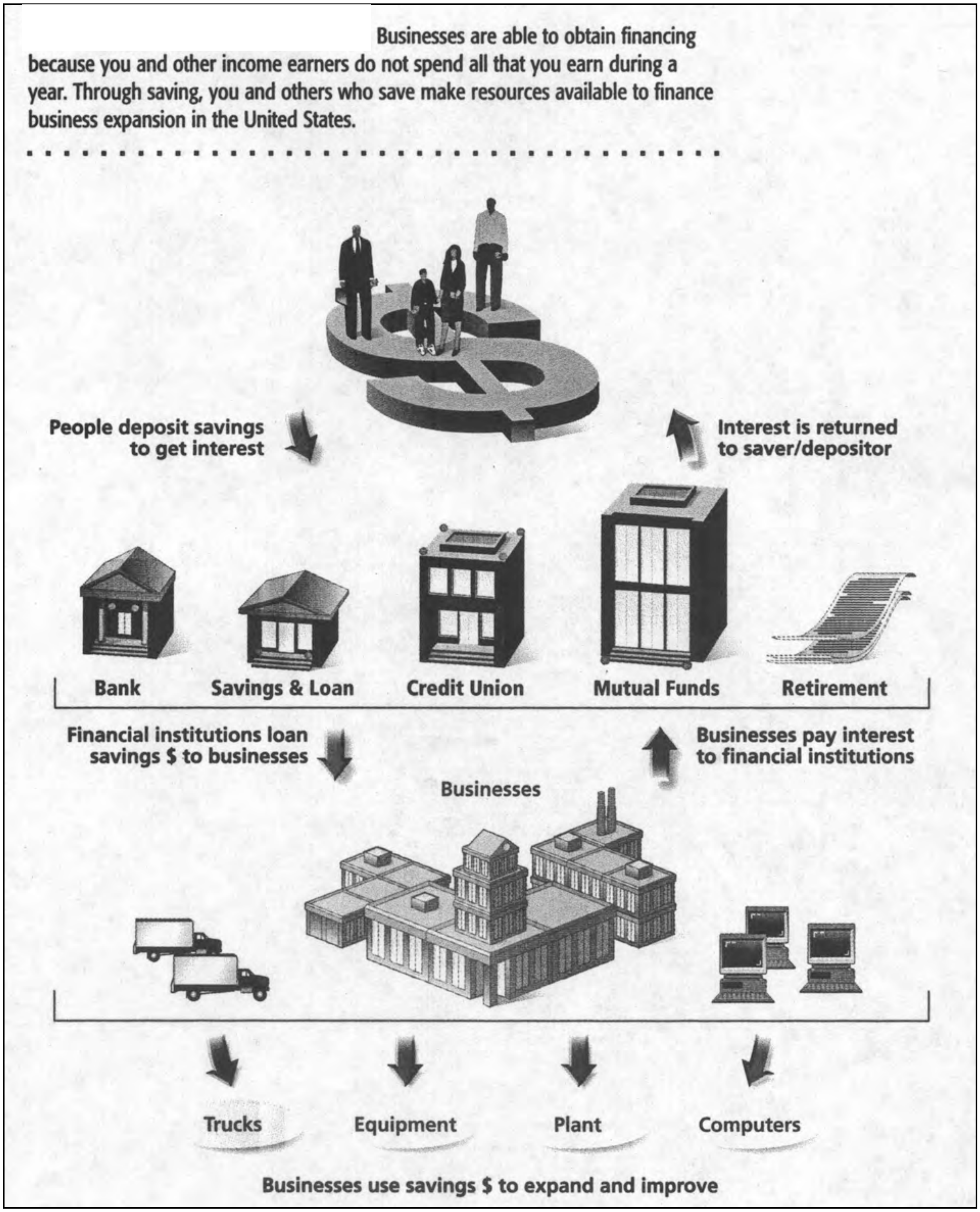
Exercise: *Assume that you are the Chief Financial Officer (CFO) for your VE firm, and you have been assigned the task of obtaining a total of $300,000 that will be used to purchase inventory, pay all outstanding debts to various creditors and to finance the purchase of new office furniture and computers. ($200,000 of the total will be used for the furniture, equipment and computers.) Using the information in the table about the financing options, as well as information in your textbook and/or the Internet, write a memo to the Chief Executive Officer (CEO) of your VE firm in which you suggest the type of financing that would be best. Make the case for the type of financing you recommend and explain why one choice is better than another. Feel free to recommend more than one type of financing (mix funding types).*

Worksheet 14B

Financing Chart

Exercise. *Study the chart below and create a title for it. Write the title in the space provided.*

TITLE: ____

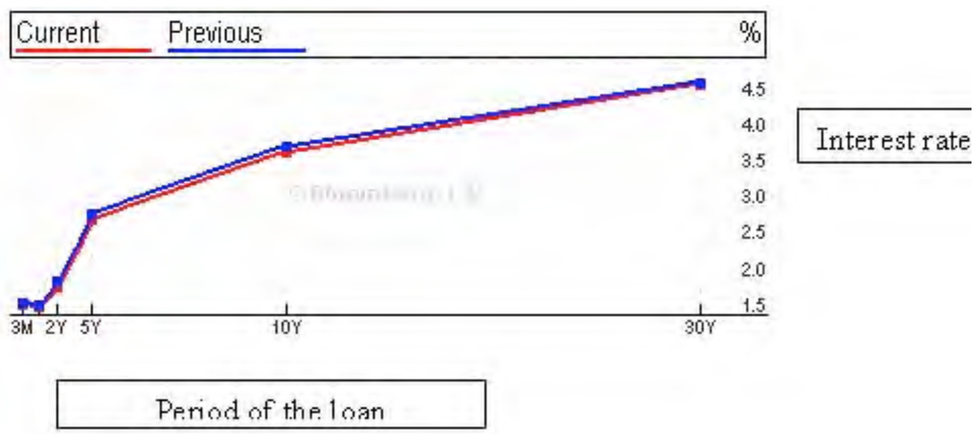


Worksheet 14C

Yield Curve: The Cost of Financing Over Time

Quite often, businesses obtain financing by borrowing money. Borrowing money has a cost. This cost is called interest—the price that a borrower pays for using somebody else's money. Interest rates are expressed in percentages per year. Generally, the longer the term of the loan, the higher the interest rate, because the lending institution is being denied access to its funds for an extended period. Also, the longer the term of the loan the greater the risk of inflation reducing the purchasing power of the loan repayment.

Exercise. *We can compare interest rates on loans for different periods of time (Y = years) through a* ***yield curve*** *like the one below. Study this yield curve, then answer the questions below.*



1. The scale on the bottom of this yield curve represents ________________________

2. The scale on the right hand side of this yield curve represents __________________

3. Approximately, what is the interest rate for a loan of:

   One year? _________

   Ten years? __________

   Thirty years? _________

4. Explain the reasons why interest rates vary on loans for different periods of time.

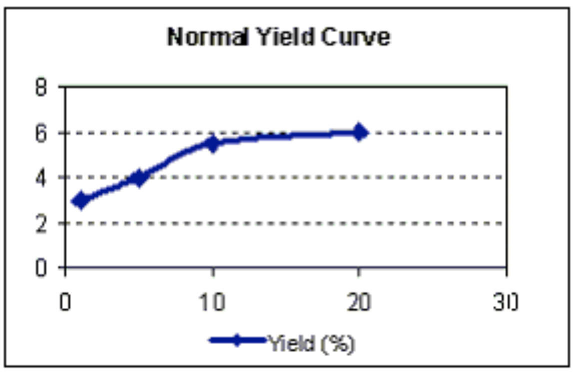
Worksheet 14D

Yield Curve: Signs for the Economy

We can learn a lot about how well the economy is doing by studying the shape of the yield curve. This page shows the four possible shapes of the yield curve and what experts say each yield curve shape tells us about where the economy is going. Study this worksheet then complete the exercise on the following page.

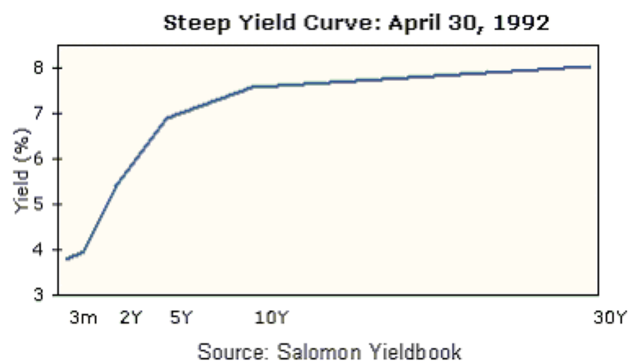
Yield curve shape: NORMAL
This shape is characterized by a chart that slopes gently upward, meaning borrowers will pay higher interest rates on loans for longer periods.

Experts say: This shows that the economy is performing about average.



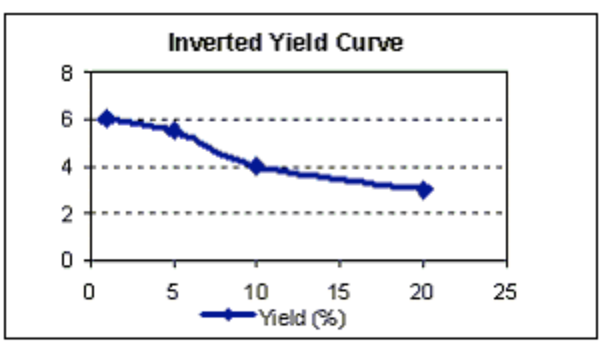
Yield curve shaper: STEEP
This shape is characterized by a chart that slopes sharply upwards. The difference between the lowest and highest interest rates is more than three percentage points, meaning borrowers will pay a lot higher interest rates on loans for longer periods.

Experts say: This shows that the economy will improve quickly in the future. Very often the yield curve has this shape at the beginning of an economic expansion.



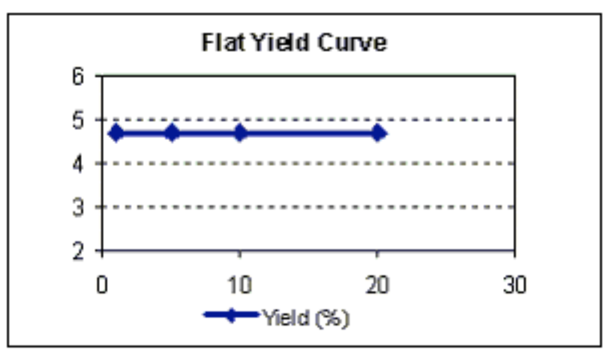
Yield curve shape: INVERTED
This shape is characterized by a chart that slopes lower for loan of longer than shorter periods.

Experts say: This shows that the economy will be getting worse in the future. People who lend money will settle for a lower interest rate now, if they think the economy and interest rates are going lower in the future.



Yield curve shape: FLAT
This shape is characterized by a chart that hardly slopes at all, meaning interest rates are about the same for loans of shorter and longer periods.

Experts say: This shows that the economy will be getting worse in the future. Generally this is the shape of the yield curve prior to becoming inverted.



Worksheet 14D, "Yield Curve: Signs for the Economy" (continued)

Exercise. *Access the following web-site:* **www.smartmoney.com/onebond/index.cfm?story=yieldcurve**
Click on the "Play" button at the bottom of the chart. The chart will continue changing until it says "Latest," meaning the most current yield. In the space below, explain your answers to the following questions:

1. What is the shape of the latest yield curve?

2. Based on the shape, how would you predict where the economy is going? Explain.