

AGRIBUSINESS PROCEDURES

Banks and Loans

Business Simulation Websites



- <http://www.perfectcompetition.net/BusinessGame.html>
- <http://www.btplc.com/Societyandenvironment/Businessgame/index.htm>
- <http://www.lemonadegame.com/>
- <http://spapps.go.com/hsb4/landing/>

A financial institution by any other name...

- ❑ **Commercial Banks** – originally, these only provided services to businesses.
- ❑ **Savings Banks** – originally, these were founded so lower-income workers had a place to save their money.
- ❑ **Savings and Loan Associations** and **Cooperative Banks** – were established to help lower-income workers to buy homes.
- ❑ **Credit Unions** – came about when groups of like individuals pooled money to provide emergency financial help for members.

Similar, but some differences...



- The products and services are similar but **REGULATION** is different:
 - ▣ “savings and loan crisis” of a few years back as S&Ls were allowed to *overextend* their lending and then had to be bailed out by the government when the borrowers defaulted.

Credit Unions vs. Banks

Credit Union

- Insured through NCUA
- Non-Profit
- Member owned
- Do not pay taxes
- Must be a member

Bank

- Insured through FDIC
- For profit
- Privately or publicly held
- Pay taxes
- Anyone may use


Who ELSE loans money?

- Credit Cards – holders make purchases on credit that are paid for later; holders may also get cash advances.
 - ▣ While many banks offer credit cards, do NOT confuse “National Bank of Toddville Visa” with the loan services of the National Bank of Toddville – these are two very different products!!!!
- “Payday Loans” – these independent businesses loan money for very short periods of time secured only by proof of employment, typically at extremely high interest rates.
- Loan Sharks -- a person or body that offers illegal unsecured loans at high interest rates to individuals, often backed by blackmail or threats of violence

How do Thrift Institutions Work?



Banks are critical to our economy. The primary function of banks is to put their account holders' money to use by lending it out to others who can then use it to buy homes, businesses, send kids to college...



When you deposit your money in the bank, your money goes into a big pool of money along with everyone else's, and your account is credited with the amount of your deposit.

When you write checks or make withdrawals, that amount is deducted from your account balance. Interest you earn on your balance is also added to your account.

But the amounts are “virtual” – the bank probably doesn't really have that much money in the vault!




Banks create money in the economy by making loans.

The amount of money that banks can lend is directly affected by the reserve requirement set by the Federal Reserve. The reserve requirement is currently

3 percent to 10 percent

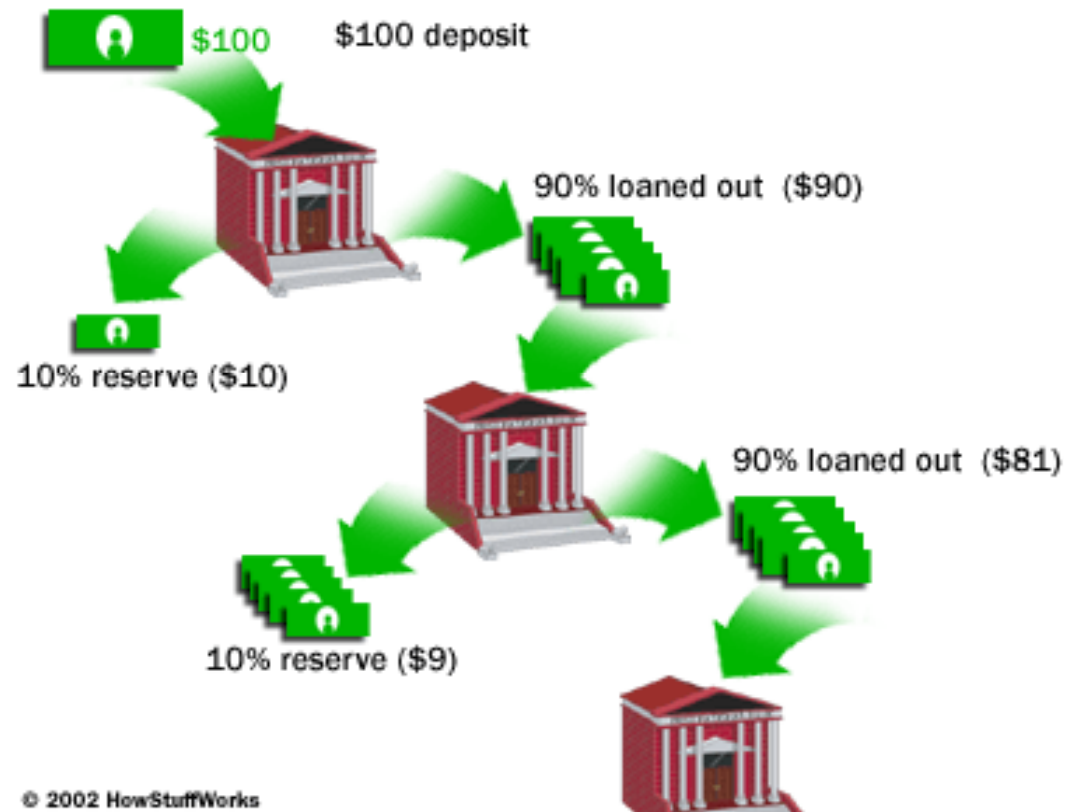
of a bank's total deposits. This amount can be held either in cash on hand (in the vault) or in the bank's reserve account with the Fed.



In this way, money grows and flows throughout the community in a much greater amount than physically exists!

How Money Works

To see how this affects the economy, think about it like this. When a bank gets a deposit of \$100, assuming a reserve requirement of 10 percent, the bank can then lend out \$90. That \$90 goes back into the economy, purchasing goods or services, and usually ends up deposited in another bank. That bank can then lend out \$81 of that \$90 deposit, and that \$81 goes into the economy to purchase goods or services and ultimately is deposited into another bank that proceeds to lend out a percentage of it.



In this way, money grows and flows throughout the community in a much greater amount than physically exists. That \$100 makes a much larger ripple in the economy than you may realize!

Some things to consider, then...

- Why might banks impose an early **withdrawal penalty** for Certificates of Deposit? *(A CD is more or less a type of savings account with a “term”; remember, savings accounts effectively “loan” your money to the bank by allowing them to distribute it elsewhere).*
- Why might banks impose an early **payment penalty** on some loans?
- What’s TRUST got to do with it????

What is the Federal Reserve?

One of the more mysterious areas of the economy is the role of “The Fed.”

Formally known as the **Federal Reserve**, the Fed is the gatekeeper of the U.S. economy.

It is the central bank of the United States -- it is the bank of banks and the bank of the U.S. government.

The Fed regulates financial institutions, manages the nation's money and influences the economy.

By **raising and lowering interest rates**, creating money and using a few other tricks, the Fed can either stimulate or slow down the economy. This manipulation helps maintain low inflation, high employment rates, and manufacturing output.

The Chairman of the Fed is very powerful. Until recently, Alan Greenspan held this position. The new chairman is Ben Bernanke.

The Fed and Interest Rates

- The Fed's primary economic control is in the raising and lowering of short-term interest rates.
- In doing this, the Fed can **indirectly** influence demand, which then influences the economy.
- For example, if interest rates are lowered, borrowing money to make purchases becomes less expensive, and people are more motivated to spend money because they can get a better deal on the loan. Spending money, in turn, stimulates economic growth, which is what the Fed is trying to do in that instance. If there is too much money in the economy, however, people spend more money and demand for goods increases at a faster rate than supply can match. Prices rise too quickly because of the shortage of products, and inflation results.
- If there is too little money in the economy, people don't have excess spending money, and there is little economic growth.

But What is Interest?

- Interest is the price that someone pays for the temporary use of someone else's funds. To repay a loan, a borrower has to pay interest, as well as the principal, the amount originally borrowed. Interest is the compensation that someone receives for temporarily giving up the ability to spend money. Without interest, lenders wouldn't be willing to lend, or to temporarily give up the ability to spend, and savers would be less willing to defer spending.
- Interest rates on LOANS are TYPICALLY expressed as percents per year. If the interest rate is 10 percent per year, and you borrow \$100 for one year, you have to repay the \$100 plus \$10 in interest.
- When interest rates are expressed as percents per year, we can compare interest rates on different kinds of loans, and even interest rates in different countries that use different currencies (yen, dollar, etc.).

Why Does Interest Exist?



- From the lender's point of view: Interest compensates lenders for the effects of inflation, or rising prices. Prices go up every year, so lenders are repaid with dollars that can't buy as much as the dollars they lent; the lenders must be compensated for that loss of purchasing power
- Interest also compensates lenders for the risks they take. One risk is that nobody knows for certain how much prices will go up during the time that the borrower has the lender's money. Other risks are that the borrower won't repay the loan fully, on time, or at all
- For a lender such as a bank, interest covers the costs of staying in business, including the cost of processing loans, and interest also provides the profit that a lender needs to stay in business

Why Does Interest Exist?

From the borrower's point of view:

- Individuals are willing to pay interest to borrow money in order to be able to spend now, rather than later, on cars and many other items
- Individuals are willing to pay interest in order to be able to afford a large purchase, such as a home, for which they don't have enough funds of their own
- Individuals are willing to pay interest on loans to pay for education, which can increase their earning ability
- Businesses are willing to pay interest in order to borrow to invest in equipment, buildings, and inventories that will increase their profits
- Some borrowers are willing to pay interest on certain loans because of the associated tax advantages. Mortgage interest, for example, is tax deductible. That means that in calculating how much income tax you have to pay, you can subtract the mortgage interest that you pay from your income
- Banks are willing to pay interest on their customers' deposits because they can lend the funds at higher interest rates and make a profit

So what does the FED have to do with the interest rates at my local bank????



- Banks borrow money from other banks.
- Ultimately, banks borrow from the Fed, which you'll recall is the bank of banks.
- The Fed sets the **Discount Rate**, which is the name given to the interest rate that the Fed charges banks for short-term loans.
- Obviously, banks aren't going to set their own interest rates lower than that... so that sets a floor for interest rates nationwide – not by law but by convention.

So how do banks set their interest rates?

- Looking at the Fed's Discount Rate, banks set what is called the **Prime Interest Rate**.
- The Prime Interest Rate is the interest rate charged by banks to their most creditworthy customers (usually the most prominent and stable business customers).
- **The rate is almost always the same amongst major banks.**
- Adjustments to the prime lending rate are made by banks at the same time; although, the prime rate does not adjust on any regular basis.
- It's sort of "price-fixing" but stability in this practice allows for stability in the economy (plus, if you don't follow this practice, you are bucking those "older and wiser" and you probably won't be in business for long!)

So how do banks set their interest rates?

- Using the Prime Rate, banks then set the interest for different types of loans.
- Banks call these “Loan Products”
 - ▣ A bank wants to standardize products to a certain extent, so loan officers have policy to follow.
 - ▣ Loan products are competitive between banks, though, which is why you need to shop for loans.
- The terms of Loan Products dictate
 - ▣ The length of the loan
 - ▣ The amount of the loan (min/max)
 - ▣ The Interest Rate!

Factors banks consider when setting the parameters for loan products

- The borrower's credit rating and the length of the borrower's relationship with the institution.
- What you're going to do with the money
 - ▣ Some business startups are riskier than others
 - ▣ Personal credibility is HUGE in obtaining a business startup loan, which is why the business plan is so important!
- Whether the loan is secured with an asset, i.e. your house or car.
- The length of the loan.

What about COMPOUND interest (and Annual Percentage Rate)?

Compound interest is just interest paid on interest. Here are the calculations for a 5 Year Loan at 10% YEARLY:

Year	Loan	Interest	Loan at End
1	\$1,000.00	$(\$1,000.00 \times 10\% =)$ \$100.00	\$1,100.00
2		$(\$1,100.00 \times 10\% =)$ \$110.00	\$1,210.00
3		$(\$1,210.00 \times 10\% =)$ \$121.00	\$1,331.00
4		$(\$1,331.00 \times 10\% =)$ \$133.10	\$1,464.10
5		$(\$1,464.10 \times 10\% =)$ \$146.41	\$1,610.51

Compound Interest and Annual Percentage Rate



- ❑ Interest can be compounded daily, weekly, monthly, yearly, etc. (or not at all, a SIMPLE interest rate).
- ❑ So compounding is good if you are saving, bad if you are borrowing.
- ❑ If interest is compounded at a rate other than yearly, an ANNUAL PERCENTAGE RATE (APR) must be disclosed for comparison purposes.

APR

An effective annual interest rate of 10% can be expressed in several ways:

- 0.7974% effective monthly interest rate
- 9.569% annual interest rate compounded monthly
- 9.091% annual rate in advance.

These things all say exactly the same thing, i.e. when you do the calculation the way the words tell you to, the rate would be the same as 10% compounded annually.

One more fun twist with interest:

Variable Interest Rates

- “Balloon” loans, where the interest rate stays the same for the term of the loan, then changes to a new rate unless you pay the loan off at that time.
- “Variable rate” where the interest varies month to month along with national indicators (usually that Prime Rate we mentioned).
- “Introductory Rate” that favorite with credit card companies – a very low rate to get your debt and then the rate gets higher when you haven’t paid it off as fast as you thought you would!
- There are plenty more of these out there.

Commercial Loans

- ▣ Monthly loan payments
 - Rely on three factors
 - Interest rate
 - Amount of loan
 - Time of loan to be repaid
- ▣ Internet payment calculator
 - Enter different values to see what the payments look like for longer, shorter terms; small differences in interest rates; different loan amounts
 - <http://ray.met.fsu.edu/~bret/amortize.html>
- ▣ Trade-offs
 - You need enough money to get started, but debt is a financial and mental burden!

Typical Business Loans from Banks

- Usually relatively short term
 - ▣ Around five years
 - ▣ Long term loans will have variable interest rates
- Types of Loans
 - ▣ Traditional bank loans
 - Few days to few years
 - Loan paid when due
 - ▣ Installment loans
 - Monthly payments
 - ▣ Lines of credit
 - Automatic loan – you “draw” upon the money as needed.
 - Up to set point

Other Sources of Capital



- Equity Capital
 - ▣ Your Personal savings
 - ▣ Partners
 - ▣ Should usually equal at least 25-50% of the requirement.
- Venture capital
 - ▣ Individuals or companies provide money for part ownership
- Debt Capital other than from banks
 - ▣ Vendors, equipment manufacturers, finance companies, SBA

Other sources of capital



- Discount Accounts Receivable
 - Bank loans a business a percentage of accounts receivable
 - Business pledges accounts receivable as collateral
 - Usually on 30 day accounts
- Vendors
 - 30-90 days same as cash, delayed billing
 - Allows product to be sold before payment is due
- Small business Investment corporations (SBIC)
 - Privately owned financial corporations
 - Licensed, regulated, and promoted by SBA

Other Sources of capital



- SBA
 - Small business administration
 - Federal program
 - Guarantees your commercial loan
 - But there are limits
 - Amount of loan
 - Interest rates allowed
 - LOTS of paperwork!

Capital



- How much money will you need?
 - ▣ To open the doors, i.e. “one-time purchases”
 - Land and or Building
 - Furniture
 - Inventory
 - Equipment
 - ▣ Keeping the doors open, i.e. working capital
 - Several months expenses, including loan repayments.
 - Has to include your living expenses unless you have personal savings set aside for this!
 - Plan for the worst, work and hope for the best!

Websites

The Federal Trade Commission has an excellent site that talks about credit – everything from what your credit score means to how to repair your credit; how to build better credit and how to get your free credit reports. There is a LOT to explore at this site and, really, all the answers about credit are here.

- FTC: How to get the free credit reports to which you are entitled every 12 months: <http://www.ftc.gov/bcp/online/pubs/credit/freereports.shtm>
- FTC: how to build a better credit report: <http://www.ftc.gov/bcp/edu/pubs/consumer/credit/cre03.shtm>

The site from which to request your three free credit reports (no subscription, no gimmicks). Available once every 12 months: <https://www.annualcreditreport.com/cra/index>

A commercial site that has a lot of good information, and forums in which you can ask questions and get advice:

<http://www.myfico.com/CreditEducation/>

What appears to be a pretty fair analysis of the Savings and Loan crisis of the 1980s:

<http://www.econlib.org/Library/Enc/SavingsandLoanCrisis.html>

USA Today explains the current high rate of mortgage foreclosures: Subprime lending: --

http://www.usatoday.com/money/economy/housing/2007-03-24-subprime_N.htm

Testimony before a congressional sub-committee about subprime lending evils (explains the concept in real small words that even politicians will understand!) <http://www.responsiblelending.org/pdfs/Testimony-Calhoun092006.pdf>

An article that suggests subprime lending foreclosures will lead to an economic crisis just as the Savings and Loan collapse in the 80s did:

http://realtymtimes.com/rtnews/rtcpages/20070608_nationdoomed.htm