### Chapter 9 Bonds and Mutual Funds

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http://www.nr.cc.va/fin107

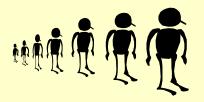
# How much would I have if I saved \$200 a month for 40 years at 10%? \$1,264,873

## What would my monthly income be at a 4% return?

\$4,216

#### What are the advantages of social security?

- Indexed to inflation
- Forced savings



## What are the disadvantages of the social security system?



- The return on savings is much lower than on personal savings
- You have no control over your money
- The principle cannot be inherited
- There can be rule changes
- The system's future is uncertain

#### What is an opportunity cost?

That which is given up in the best alternative endeavor

### What is an example of opportunity cost?

If a savings account earns 3% interest, but you could have made 10% in the stock market, your opportunity cost is 7%

### What are different ways that taxes effect savings?



- Taxes are not paid on initial income and are deferred on income from investment
- Taxes are paid on income but are deferred on return
- Taxes are paid on initial income as well as on income from investment

#### What is a bond?

A certificate of debt issued by a government or corporation guaranteeing payment of the original investment plus interest by a specified date

### What are the two types of U. S. Savings Bonds?

- Series EE
- Series HH



### How much will I pay for a Series EE Savings Bond?

Series EE Savings Bond is bought at 50% of its face value

### How much is a Series EE Savings Bond worth at maturity?



Its face value



#### How can I compare the interest rate and maturity?

The higher the interest rate, the shorter the time to mature

#### How do Series HH Savings Bonds work?

They are purchased at face value and pay interest every 6 months

## How much do I get back at maturity with a Series HH Savings Bonds?

What you put in



#### How can I purchase Series HH Savings Bonds?

Only with EE bonds held for more than a month

#### What is the rule of 72?

The return on an investment divided into 72 will tell you how long it will take the investment to double in value

#### Give an example of the rule of 72?

72 divided by a return of 10% equals 7.2 years



#### When is the best time to buy savings bonds?

Bonds bought late in the month you will earn interest for the whole month

#### When is the best time to redeem savings bonds? If you redeem it at the beginning of the month you will earn interest as if you held it for the entire month

## What is the maximum I can invest in savings bonds?



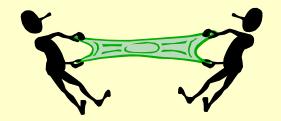
\$15,000 a year

#### Is the return on a savings bond fixed?

Yes, unless it is held to maturity at which time it is worth the fixed rate or 85% of what a five year Treasury note is paying at the time

### How long do I have to keep a U.S. savings bond?

At least 6 months to earn any interest



#### Can I cash in the bond at any time?

Redeeming the bond before maturity will earn you the guaranteed interest up to the time of redemption

## Do I have to redeem a savings bond after it matures?



You can keep the bond and continue earning interest until the bond is 30 years old

## What are some advantages of U.S. Savings Bonds?



- Proceeds used for education is tax free
- Bonds can be bought in small denominations at same rate
- •With HH bonds taxes are paid only as you receive the money
- You can postpone taxes after redemption by buying HH bonds
- •Federal taxes not paid until bond is redeemed
- No state or local taxes on return
- You can purchase and redeem at banks
- Automatic withdrawal from paycheck
- No commissions or fees

### What is a U.S. Treasury Security?

A U.S. government bond



#### Are taxes paid on Treasury Securities?

State and local taxes are not paid, but federal taxes are paid

#### What is a secondary market?

A market that a bond can be bought and sold after the initial purchase but before its maturity

### What is a another name for secondary market?

**Bond Market** 





# What determines the price of a bond in the secondary market? What the buyer and seller agree upon

#### Why do longer term bonds pay a higher interest?

Greater risk and more time to use purchaser's money



#### Why do bond prices rise when interest rates fall?

Sellers of bonds are in a better bargaining position

#### Why do bond prices fall when interest rates rise?

Buyers of bonds are in a better bargaining position

#### What are the types of marketable securities?



- Bills
- Notes
- Bonds

#### What is a treasury bill?

Short-term obligations issued with a term of 13 weeks, 26 weeks, or 52 weeks

### What is par? The date a bill matures



## When does the purchaser of a bill receive payment?

The bill only pays interest when it matures

#### What is a treasury note?

A medium-term obligation issued with a term of at least one year but no more than ten years

# When are interest payments made on treasury notes? Semi-annually



#### What is a treasury bond?

A long-term obligation issued with a term greater than ten years

## When are interest payments made on treasury bonds?

Semi-annually



#### Treasury securities can be purchased from ...

- security dealers
- banks
- brokers
- Federal
  - Reserve Banks
  - Bureau of the Public Debt

## What are advantages of buying securities directly from the government?

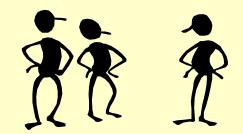
- Several options
- You will not have to pay a fee or commission
- The Security will be in your name

## When I buy a security from a bank will it be in my name?

Usually the Security will be in the name of the bank or brokerage house - called the "street name"

## Why does a bank or brokerage house want the security in its name?

Less time and paper work



#### Am I taking a risk with a street name?

If the seller goes out of business you will have to deal with Securities Investor Protection Corporation to have your money refunded

# Can I buy a security from a bank or a brokerage house and have it in my name?

YES

## What is another downside to holding a security in my name?

You you will not be able to sell it

#### How do I contact the Bureau of the Public Debt?

Bureau of the Public Debt Division of Customer Services Washington, DC 20239-0001

#### How do I contact the Federal Reserve?

(202) 874-4000

http://www.frb.ny.org

#### What is a zero-coupon bond?

Municipal, corporate, or U.S. Treasury bonds issued at prices below their face value

#### When do zero-coupon bonds pay interest?

They do not pay interest until they mature



## What is the least amount of money I need to buy a zero-coupon bond?



#### What is a municipal bond?

IOU's issued by state and local governments and by special purpose government agencies

#### What are the advantages of municipal bonds?



- They are guaranteed in case of default
- Municipal bonds are usually not callable for at least 10 years
- No state taxes have to be paid if the municipal is in your home state
- No federal taxes have to be paid on the return

## What are the disadvantages with municipal bonds?



- •Fees paid are not tax deductible when a capital gain is made
- The interest rate offered is lower, everything else being equal, because of the tax advantage
- Profits are subject to state and local capital gains tax

### Who gains the most from municipal bonds?

High income people



#### Can municipal bonds be bought directly?

Municipalities prefer to sell bond issues to underwriters who sell them to brokerage houses

#### How much will I have to pay for a municipal bond?

Usually for a \$1,000 or less



#### What are the two types of municipal bonds?

- General Obligation
- Revenue



#### What is a general obligation bond?

The obligation is met by tax revenues

#### What is a revenue bond? Obligation is met by revenues of specific projects, like roads, schools and bridges

#### Which type of bond is most risky?

Revenue bonds tend to by more risky because the revenues from the projects may not live up to expectations

#### What is a tax equivalent yield?

The amount of your gain considering taxes

#### What is a tax equivalent yield called?

Effective interest rate



#### What is a stock market?

A place where people buy and sell shares of stock

#### What is a share of stock?

Is ownership in the assets, earnings, and future direction of a corporate form of business

## What is the money market?

A place where people buy and sell securities

#### What is a mutual fund?

An investment company that combines the funds of investors who have purchased shares of ownership in the company

#### Where does a mutual fund invest?

The stock, bond or money market



#### What is a no-load fund?

Has no commissions and fees when transactions are made

## Do no-load funds have any charges?

All funds have an expense ratio called 12b-1 fees

## How much should I pay in 12-b1 Fees?

Avoid paying 12b-1 fees of more than a quarter percent a year

#### What is a load fund?

Commissions and fees are paid when transactions are made

#### What are the different kind of loads?

Front-end



Back-end

#### What is a front-end load fund?

A fund where you pay commissions and fees at the time you buy from the fund

#### What is a back-end load?

You pay a commission or fee when you sell from the fund

### What can I buy through a mutual fund?

- Stocks
- Bonds



Money Market

### What is the money market?

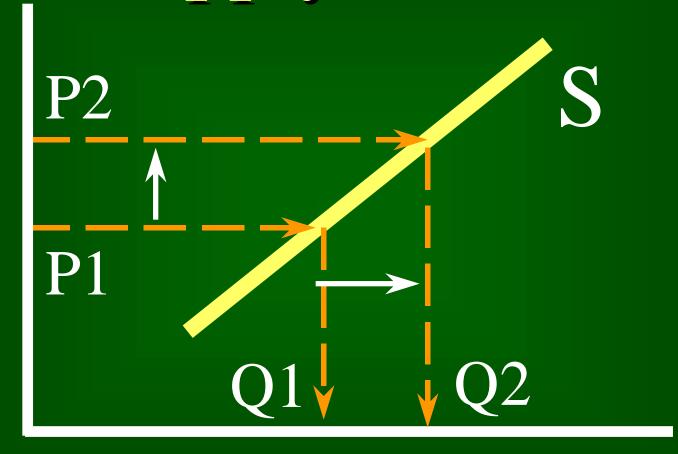
Specializes in purely interest earning assets

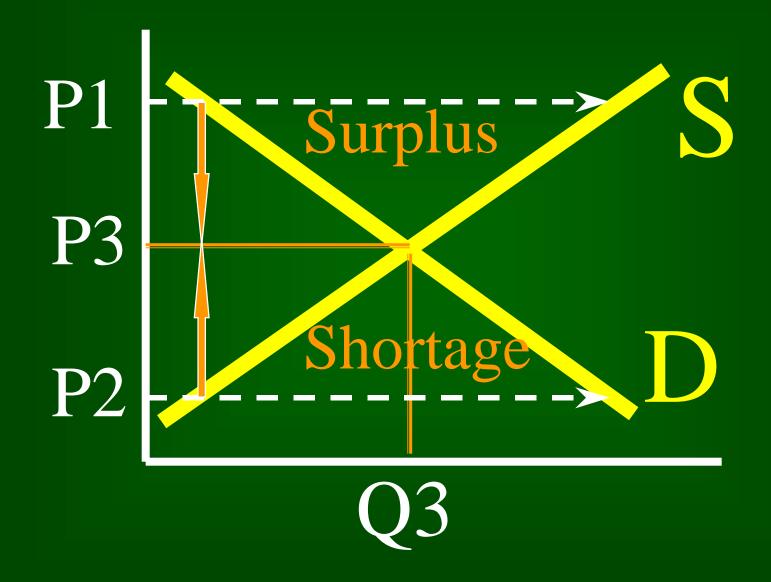
# What determines the prices of stocks in the stock market?

By supply and demand of the particular stock

# Demand Curve

#### Supply Curve

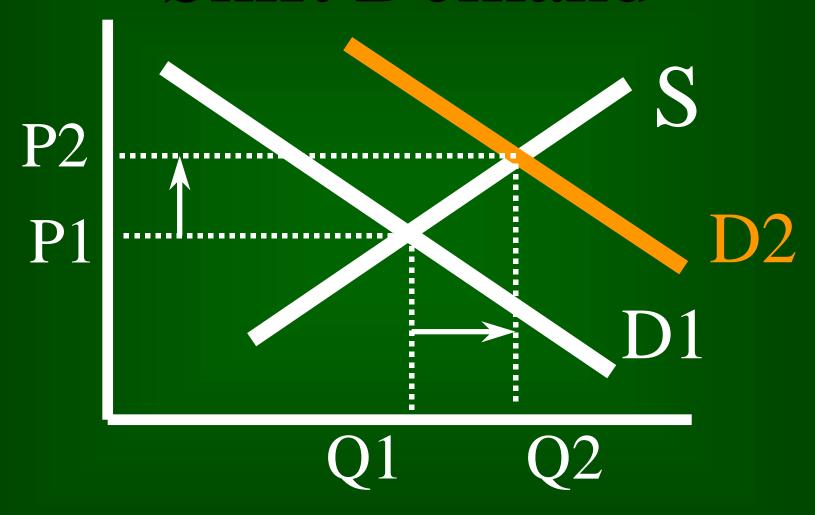


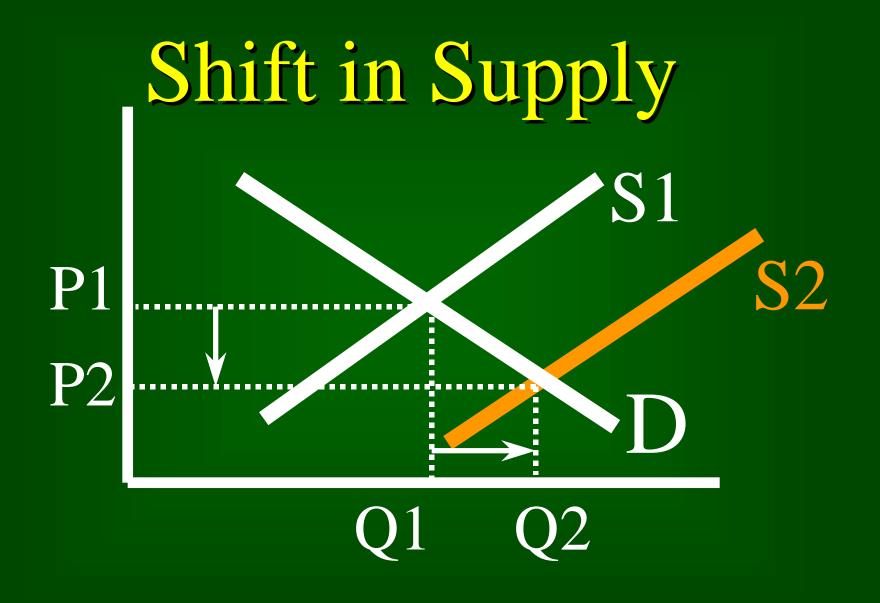


# Shift in Demand



#### Shift Demand





### How do capital gains taxes relate to stocks?

When you sell a stock for more than you paid for it, you owe a capital gains tax

#### How do income taxes relate to stocks?

When you receive a dividend from the stock, you owe income tax on that income

## What are three ways to make money in the bond market?

- Interest
- Sell the bond for more than you paid for it
- Reinvest your accrued interest back into the fund

# Why am I vulnerable to the market when I buy bonds through a mutual fund?

Because mutual funds sell bonds before they mature

## What is the effect of a change in interest rates on bonds?

- •When interest rates rise by 1 percent, bond prices fall by about 10 percent
- When interest rates fall by 1 percent, bond prices rise by about 10 percent

## What if I owned the bond myself?

You have the choice of keeping or selling it when bond prices fall

#### What is a callable bond?

A bond that the seller can simply pay you off when it is in his favor to do so

# Why would a corporation make a call on a bond?

In times of falling interest rates, a corporation can save money by paying off high interest and replacing it with low interest debt

# Is there an advantage of owning bonds through a mutual fund?

Yes! You are less susceptible to a bond call

#### What is an annual distribution?

Each year mutual funds are required to distribute to shareholders any income that exceeds fund expenses

# Do I pay taxes on annual distributions if I keep my money in a fund?

Any income is subject to income taxes and any capital gains is subject to capital gains taxes in the year they are paid

## When is the best time to buy into a mutual fund?

Shortly after the fund's distribution



#### What happens if I buy into a mutual fund just before the distribution? You can pay taxes on phantom income or capital gains because it represents

the profits of others

## How can I avoid paying taxes on phantom gains?

- After the first of the new year, take your combined money and buy back into the mutual fund
- Receive your distribution in cash then sell all of your stock before the end of the year

# Why will selling and then buying back into the mutual fund save taxes?

Because your gains will be exactly offset by your losses

### When do mutual funds pay distributions?

Normally during December



#### What is IRS Form 1099-DIV?

When you receive distributions you receive IRS Form 1099-DIV

## How do I know when to buy stocks, bonds, or securities?

Depending on interest rate movement, there is a best time to buy into one of these three markets

#### When is the best time to buy into the bond market?

When interest rates are falling bond prices are rising

#### When is the best time to buy into the stock market?

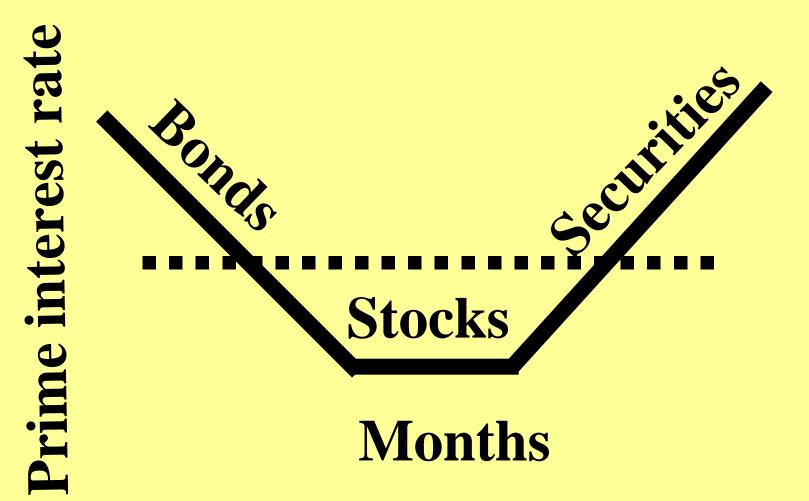


When interest rates are in a valley

# When is the best time to buy into the money market?

When interest rates are above a certain level and are rising

#### Money Movement Strategy



# When does the money movement strategy work the best?

Within a tax deferred no-load mutual fund

#### How many mutual funds are there?

About 4,000 in U.S.



#### What are the different kind of funds available?

- Balanced
- Growth
- Income
- Index

- Industry
- International
- Money market
- Municipal

## What are some helpful magazines?

- Barron's
- Forbes
- Financial World
- Business Week

- Kiplinger's
- Money
- Fortune
- Morningstar

## Can magazines be Yes! biased?

Especially with companies who advertise with them and authors can be biased

## Where might be a better place to get advice?

- Stock broker
- Financial advisor



# Is a fund's past performance a good indicator of its future performance?

Not usually, especially if the fund has changed managers

#### Are some funds more stable than others?

YES, large funds tend to be more stable than smaller funds

## How much will it cost me to get started in a mutual fund?

\$1,000 to \$3,000

#### Is there a cheaper way?

With automatic withdrawal from your checking account monthly, as little as \$100 could get you started with some funds

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