

## **Chapter 1**

### **Forms of Business Organization**

*Proprietorship*- an unincorporated business owned by one individual

Advantages- easy and inexpensive to form, few government regulations, lower income taxes than corporations

Disadvantages- unlimited personal liability, life of the business is limited to the life of the owner, difficult to obtain large quantities of capital

*Partnership*- an unincorporated business owned by two or more persons

Advantages- easy and inexpensive to form, lower income taxes than corporations

Disadvantages- unlimited personal liability, difficult to raise large quantities of capital

*Corporation*- a legal entity created by a state separate and distinct from its owners and managers

Advantages- unlimited life, easy transferability of ownership, limited liability, easy to acquire large quantities of capital

Disadvantages- subject to double taxation, regulated by the government

### **Balancing Shareholder Value and the Interests of Society**

The goal of management of publicly owned companies should be to maximize shareholder wealth. Decisions should be made to maximize the long-run value of the firm's common stock.

When taking these steps, managers have to keep in mind society-imposed constraints like the company's impact on the environment and the community, as well as negative media coverage and additional lawsuits.

### **Intrinsic Value, Stock Prices, and Executive Compensation**

*Intrinsic Value*- an estimate of a stock's "true" value based on accurate risk and return data

*Market Price*- the stock value based on perceived, but possibly incorrect, information as seen by the marginal investor

*Marginal Investor*- an investor whose views determine the actual stock price

*Equilibrium*- the situation in which the actual market price equals the intrinsic value, so investors are indifferent between buying and selling a stock

A growing number of companies have used stock and stock options as a key part of executive pay. The hope is that by structuring compensation this way, managers will think more like stockholders and continually work to increase shareholder value. Sometimes this only motivates management to seek immediate profit by maximizing their stock's current market price, not its long-term value.

Management's goal should be to take actions designed to maximize the firm's intrinsic value, not its current market price.

## **Business Ethics**

### *Consequences of Unethical Behavior*

In the cases of WorldCom's, Enron's, and Arthur Anderson's bankruptcies, misleading accounting practices lead to overstated profits. The executives of these companies reaped millions before their stock prices declined. Merrill Lynch and Citigroup were accused of facilitating these frauds.

These are examples of comprised moral ethics leading to a negative reputation, bankruptcy, and pessimism in the marketplace.

## **Conflicts Between Managers, Stockholders, and Bondholders**

### *Managers vs. Stockholders*

Managers might be a little more inclined to maximize their own wealth versus that of their stockholders. This can lead them to pay themselves excessive salaries. Motivators for management to keep the shareholders' interests at heart include (1) reasonable compensation packages, and (2) the threat of a hostile takeover.

1. Compensation should be structured so that managers are rewarded on the basis of the stock's performance in the long run, not the stock price on an option exercise date.
2. Because the majority of today's stock is held by institutional investors, insurance companies, pension funds, private equity companies, and hedge funds all have the power to step in and take over if the company is underperforming.

### *Stockholders vs. Bondholders*

Bondholders get fixed payments regardless of whether the company performs well while stockholders do better as the company does better.

When it comes to capital projects, stockholders are more invested in the success of a company and are therefore, more willing to look at return in regard to risk. Bondholders, on the other hand, don't like the idea that the company in which they are invested will take on more risk while their payment remains fixed. Generally, bondholders are more risk averse while stockholders are more risk tolerant.

## **Chapter 2**

### **Vocabulary**

*Spot Markets*- assets are bought and sold for on-the-spot delivery

*Future Markets*- buy or sell asset at some future date

*Money Markets*- funds are borrowed or loaned for short periods (one year or less)

*Capital Markets*- stock and immediate or long-term debt (longer than one year)

*Primary Markets*- corporations raise capital by issuing new securities

*Secondary Markets*- financial assets are traded among investors

*Private Markets*- transactions directly between parties

*Public Markets*- standardized contracts are traded on organized exchanges

*Derivative*- financial asset whose value is dependent on the value of another asset

*Investment bank*- help businesses obtain capital

*Commercial bank*- one-stop-shop for savers and borrowers

*Financial Service Corporations*- financial umbrella that provides many financial services

*Mutual Fund*- pools investor funds to purchase securities and reduce risk

*Money Market Funds*- mutual funds for short-term low-risk securities

*Physical Location Exchanges*- Physical Markets to buy and sell securities

*OTC Market*- telephone and computer markets (often includes small corporations)

*Dealer Markets*- dealers hold inventories of securities to sell online

*Closely Held Corporation*- owned by few individuals who work for the company

*Publicly Owned Corporation*- owned by many individuals

*Going Public*-act of selling stock in the public market for the first time

*IPO*- Initial Public Offering; market for companies to go public and raise capital

*Broker*- oversees and puts the transaction together

*Dealer*- buys and sells securities they have to offer

*Broker-Dealer*- does the job of either a broker or a dealer

### **Money Market Securities**

*U.S. Treasury Bills*- sold by the U.S. Treasury

Maturity- Up to 1 year

*Banker's Acceptance*- note paid back by a bank

Maturity- Up to 6 months

*Dealer Commercial Paper*- not from bluechip companies with high credit ratings

Maturity- Up to 270 days

*Negotiable Certificates of Deposit (CD)*- issued by commercial banks to large investors

Maturity- Up to 1 year

*Money Market Mutual Funds*- invest in T-Bills, CDs, and Commercial Paper

Maturity- none

*Consumer Credit*- issued by banks, credit unions, and finance companies to individuals

Maturity- variable

### **3 Ways Capital is Transferred**

1. Direct Transfer- business sells stock or bonds directly to savers
2. Indirect through Investment Bank- investment bank is underwriter or middleman; securities pass through investment bank to primary market
3. Indirect through Financial Intermediary- exchanges saver funds for securities to buy business securities

**Need for Efficient Capital Markets-** The economy cannot function to its fullest potential without an efficient financial system .

**Physical Asset Market vs. Financial Asset Market-** Physical asset markets sell wheat, cars, real estate, computers, etc. Financial asset markets deal with stocks, bonds, mortgages, loans, derivatives, etc.

**Spot Markets vs. Physical Markets-** Spot markets sell assets for on-the-spot delivery, while future markets sell assets to be acquired in the future.

**Money Markets vs. Capital Markets-** Money markets deal with short-term debt, while capital markets deal with long-term capital and debt.

**Primary Markets vs. Secondary Markets-** Primary markets provide capital to the corporations and secondary markets are between investors.

**Private Markets vs. Public Markets-** Private held corporations trade in the private market and publicly owned corporations trade in the public market.

**Financial Markets and a Healthy Economy-** Financial markets facilitate the transfer of money from savers to demanders.

**Commercial Bank vs. Investment Bank-** Investment banks help corporations raise capital and commercial banks are the one-stop-shop for savers and demanders.

### **Major Financial Institutions**

1. Investment Banks
2. Commercial Banks
3. Financial service corporations
4. Credit Unions- members have common bond, cheapest source of funds for individual borrowers
5. Pension funds- retirement plans funded by corporations for their workers
6. Life Insurance Companies- take savings from annual premiums and invest them to pay beneficiaries of the insured party
7. Mutual Funds

8. Exchange Traded Funds (ETFs)- similar to a mutual fund, for investors interested in a particular market
9. Hedge Funds- unregulated, high risk mutual funds with high minimum investments
10. Private Equity Companies- like hedge funds with the intention to buy and manage firms

**Physical Location Exchange vs. NASDAQ-** Physical location markets are in person and NASDAQ is online or over the phone.

**Ask-Bid Spread-** difference between the ask and bid prices that represent the dealer's profit

**Dutch Auction-** transaction price is set at highest bid to the highest bidder (Google did this)

## The Business Cycle

### **GDP- Gross Domestic Product**

- #1 measure of a nation's wealth
- Total national output
- Includes everything produced and sold in the US
  - What consumers spend on food, clothing, and housing
  - What businesses spend for buildings, equipment, and supplies
  - What government agencies spend to pay employees and to buy supplies
- GDP replaced GNP (Gross National Product)
  - GDP focuses on location
  - GNP focuses on citizens of a country
- GDP per Capita
  - GDP divided by total population
  - Per person worth in national wealth

### **Capacity Utilization- Percent of Potential Capacity**

- Hospitality Industry example:
  - If the capacity utilization increases, the company is making more revenue.
- Businesses prefer to work at 75%-85% capacity

### **Labor Productivity- Output of Workers/Machines per Hour**

- Labor intensive
- Diminishing marginal product- After a certain point, the total number of workers stops increasing the output of services

### **Industrial Production- Output per month for industries**

#### **Labor Costs**

- As prices go up, wages go up, but a company's profit margin goes down

### **3 Goals of the Government for the Economy**

- Stable prices
- Steady growth in GDP
- Low unemployment
  - Full employment is between 4%-6% unemployment

#### **Current/Nominal Dollar GDP**

- Output of 1 year at THAT YEAR'S prices
- Not adjusted for inflation

#### **Constant/Real Dollar GDP**

- Uses a FIXED price to adjust for inflation
- Prices from a base year are used every year
- More important than Current GDP

## **Spending**

- Opposite of GDP (Spending)
- Consumer spending- 67%-70% of all spending
- Business spending
- Government spending

## **Economic bellwether- Indicators that project the direction of economy**

### **CCI- Consumer Confidence Index**

Conference board references economy and sends out surveys on consumer optimism. The results of the surveys are summarized in the Consumer Confidence Index.

### **Both indicate the level of spending that consumers were engaged in:**

- High consumer confidence/sentiment- Consumers generally feel good about their financial condition
- Low consumer confidence/sentiment- Consumers are less confident and spending will decrease

### **Durable goods- Goods that have a lifespan of 3 or more years**

When companies plan to purchase these goods, it can indicate that the economy is expanding.

### **Personal Income**

- Earned Income- wages
- Portfolio Income- interest/ investments
- Passive Income- rent
- Disposable Income- Earned income minus taxes
  - Used to pay for basic living needs
- Discretionary Income- Money available after paying for basic living needs

### **Inflation- General increase in the average level of price over time**

- Too many dollars for too few goods
- Measure of economic activity

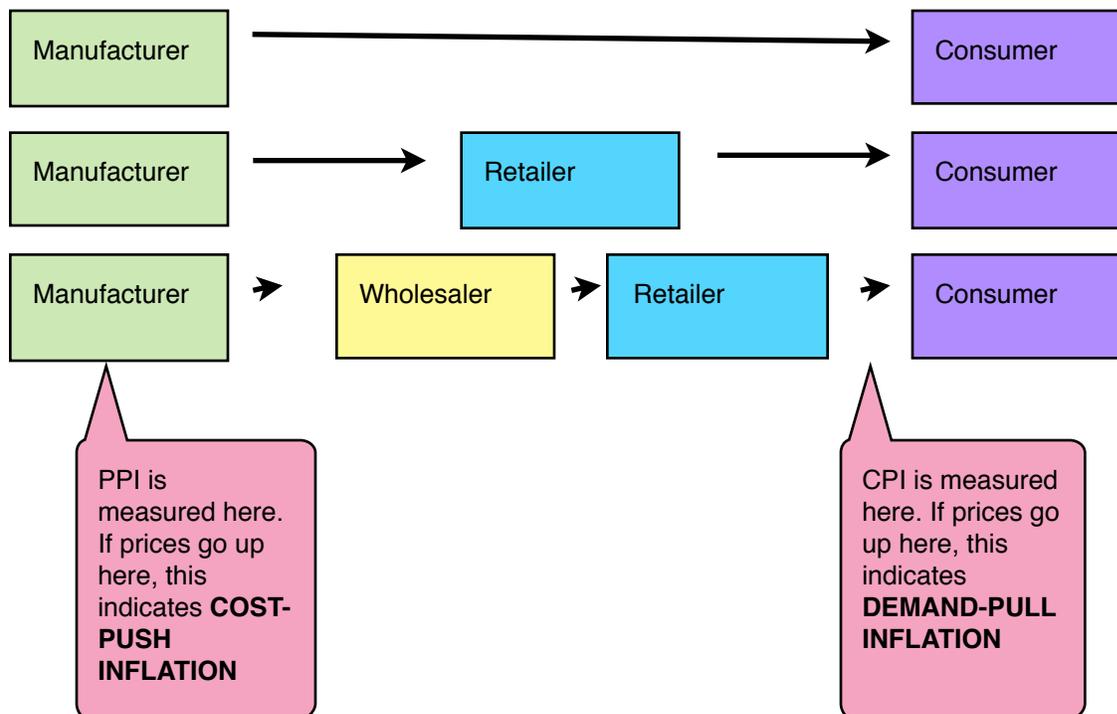
## Common Measures of Inflation

- CPI- Consumer Price Index- Tracks price changes in a select basket of goods and services

- 8 Groups

- Food and beverages
- Housing
- Apparel
- Transportation
- Medical care
- Recreation
- Education and communication
- Other

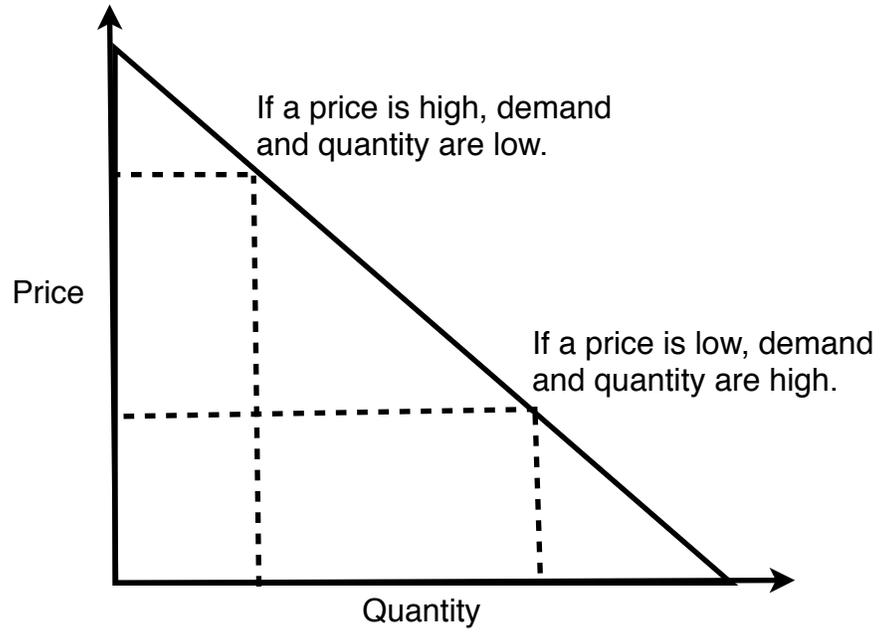
- PPI- Producer Price Index- Tracks prices changes from the manufacturer to the wholesaler



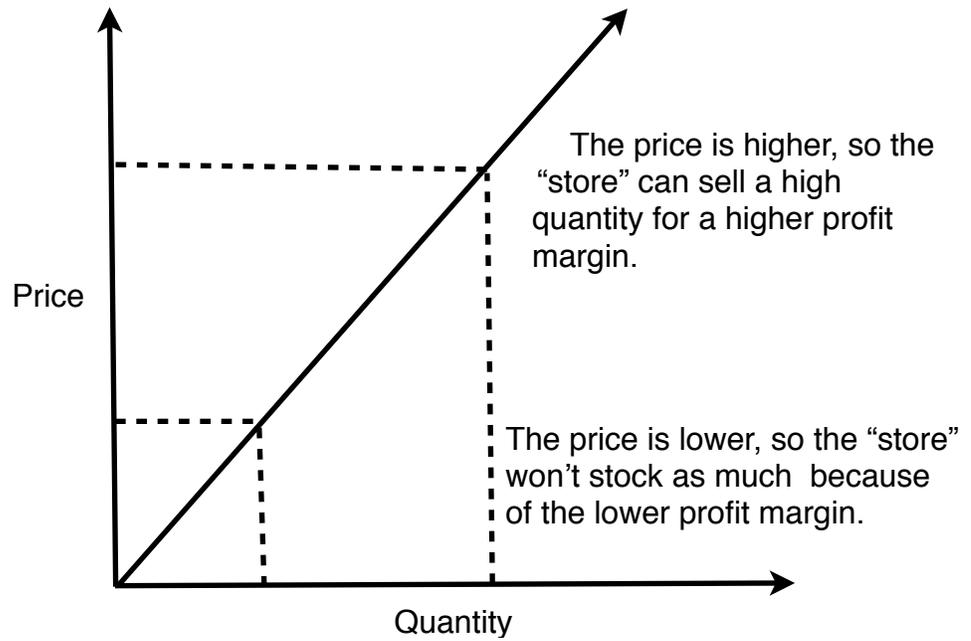
## Supply and Demand

Law of Supply and Demand- An increase relationship exists between price and quantity

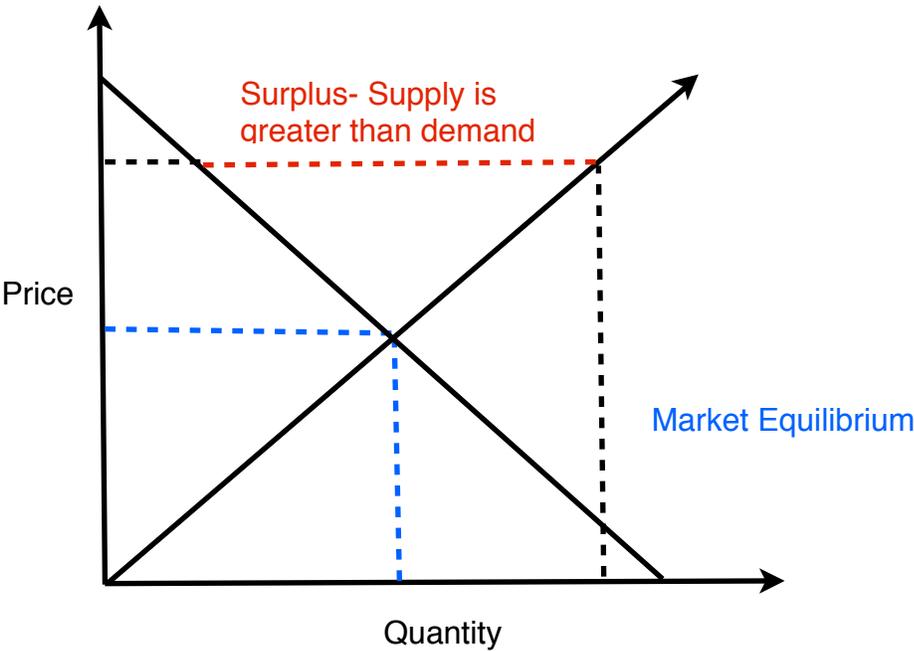
## Demand



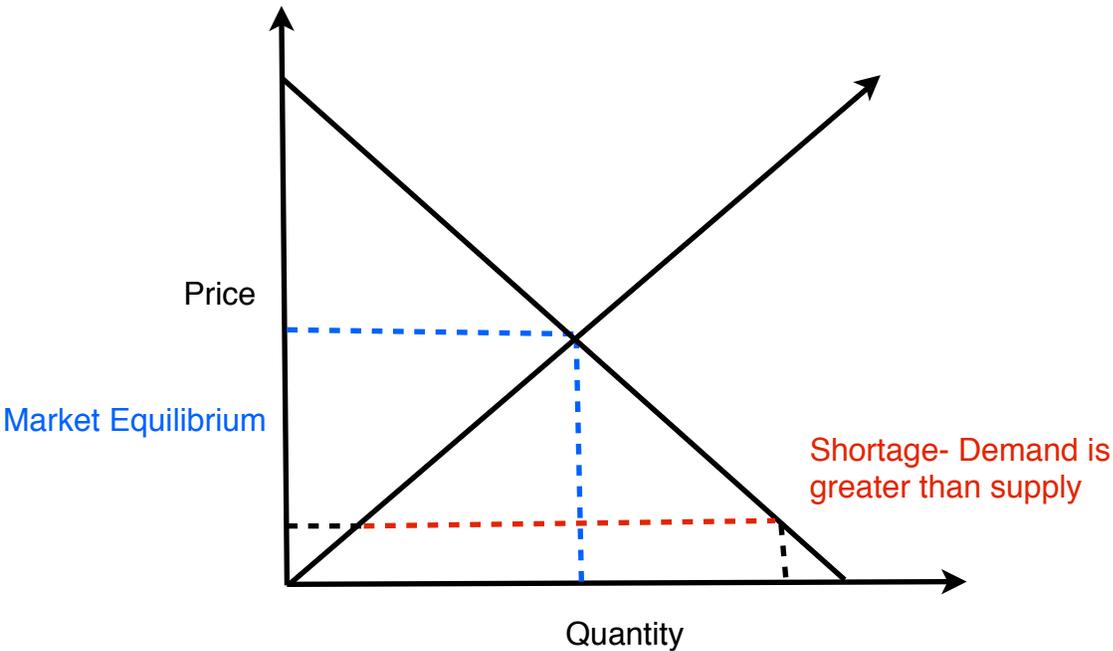
## Supply



**Supply/Demand- Surplus**



**Supply/Demand- Shortage**



**Excess supply of goods= Lower prices**  
**Excess demand for goods= Higher prices**

### **Economic Activity**

	<u>Expanding</u>	<u>Contracting</u>
Spending	Up	Down
Borrowing	Up	Down
Interest Rates	Up	Down

**Easy Money- Rates lower**  
**Tight Money- Rates higher**

### **Short Term Interest Rates**

Short term rates are mainly tied to Treasury Bills.

- Prime rate- Rates given to best customers
  - Add 3% to the Federal Funds rate

### **Money Supply**

- M1
  - All money in checking accounts and money in circulation and traveler's checks
  - Indicator of spending
- M2
  - Money is savings accounts, money market accounts/mutual funds, CD added to M1
  - Subtract M1 for true M2
  - Indicator of recession
- M3
  - M1+M2 and Jumbo CDs (from institutional investors; no less than 100,000)
  - No longer used

### **Federal Reserve System**

#### Monetary Policy

- Reserve Requirements- Banks must keep a percent of depository funds at all time
  - Changed the least
  - Lowered during a contraction
  - Raised during an expansion
- Interest Rates
  - Federal Funds Rate- banks borrowing from each other
    - Currently .25%
    - Discussed every 6<sup>th</sup> Tuesday
  - Discount Rate- banks borrowing from the FED Window
    - Usually 50 basis points higher than Federal Funds Rate
- Open Market Operations- FED buys treasury securities from banks (to boost economy) or sell treasury securities (to slow economy)
  - Used most

## Functions

- Check collection and clearing
- Supplies banks with paper currency
- Holds reserve balances for depository institutions

The Federal Reserve is a corporation. Its chairman is appointed by the President for a 14 year term. No two governors can be from the same district.

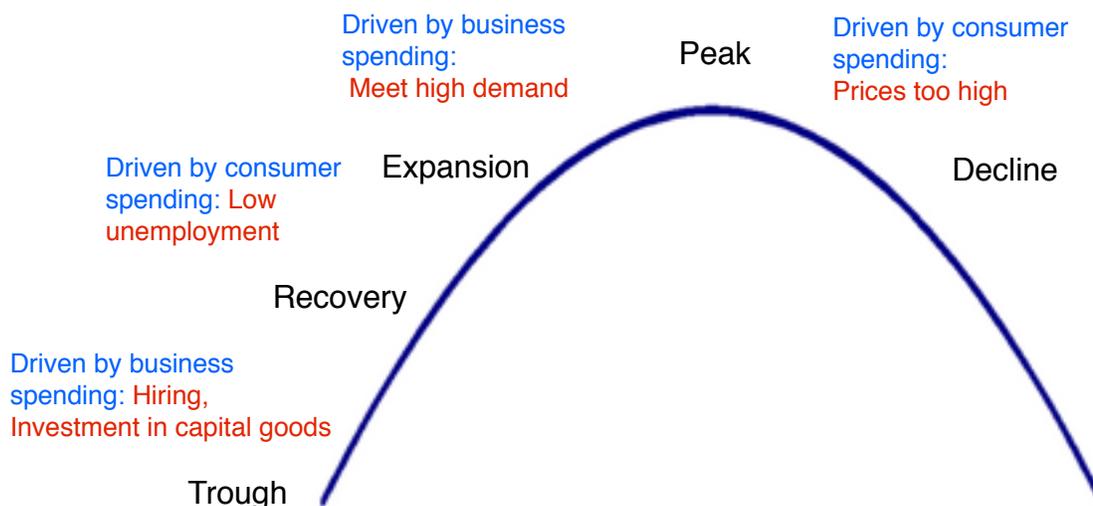
## FOMC- Federal Open Market Committee

- Decide interest rates every 6<sup>th</sup> Tuesday
- 12 Presidents vote on raising, lowering, or not changing interest rates
  - 6 Board of Governors
  - President of the New York District- because of bond market
  - 5 other rotating presidents of other districts

## 5 Truisms of Business Cycle

- Supply and Demand
  - Demand > Supply = Expansion
  - Supply > Demand = Contraction
- Demand is not limited by earned income
  - Income and credit limit
- Overheating leads to cooling off
  - Demand is greater than supply
  - Increased capacity utilization
  - High interest rates
  - Little money to borrow
- Contraction leads to an efficient economy
  - Supply and demand even out
  - Only strong companies survive
- Contraction sets the stage for recovery
  - Debt goes down during contraction

## Business Cycle of Spending



### **Economic Indicators**

- Average workweek for production workers in manufacturing
- Layoff rate in manufacturing
- New orders on consumer goods and materials
- New businesses (recovery and expansion)
- Contracts for capital goods (non residential)
- Net change in inventories
- New building permits for private housing
- Stock prices
- Money supply
- Employees on nonagricultural payroll
- Personal income minus transfer payments (welfare)
  - Passive, portfolio, and earned
- Industrial production
  - Manufacturing, mining, and utilities
- Average duration of unemployment
- Manufacturing and trade inventories
- Average prime interest rate from banks
- Business and industrial loans outstanding
  - More loans in an expansion
- Ratio of consumer installment debt to personal income

### **Free Reserves**

- The spread between excess reserves and borrowed reserves of FED member banks
- Negative Reserves
  - Borrowed reserves exceed excess reserves
  - Tends to drive up interest rates
  - Usually in a contraction
- Positive Reserves
  - Excess reserves exceed borrowed reserves
  - Tends to drive down interest rates
  - Usually in an expansion

Consumer demand can be indicated by retail sales, auto sales, and new housing starts.

### **Inventories**

- Raw materials
- Goods in progress
- Finished goods

### **Order Based Elements**

Durable Goods- Product life exceeds 3 years

Non Defense Capital Goods- Machinery, electrical equipment, transportation equipment

Machine Tools- Parts for durable goods

Non Residential Building

## Risk and Return- Time Value of Money

### Vocabulary

*Opportunity Cost of Funds*- the next best rate of return available to the investor for a given level of risk

*Real Rate of Interest*- the nominal rate of interest less the expected rate of inflation over the maturity of the fixed income security; represents the expected increase in actual purchasing power to the investor

*Expected Rate of Return*- weighted average of all possible returns where the returns are weighted by the probability that each will occur

*Risk*- prospect of an unfavorable outcome measured by standard deviation

*Standard Deviation*- measures the dispersion about the mean of a probability distribution

*Company-Specific Risk*- diversifiable/ unsystematic risk; can be eliminated through diversification

*Market-Related Risk*- nondiversifiable/ systematic risk; cannot be eliminated through diversification

*Asset Allocation*- identifying and selecting the asset classes appropriate for a specific investment portfolio and determining the proportions of these assets within the given portfolio

*Beta*- measure of the relationship between an investment's return and the market's returns; measures nondiversifiable risk

*Characteristic Line*- line of best fit through a series of returns for a stock relative to the market returns (slope= beta)

*Investor's Required Rate of Return*- minimum rate of return necessary to attract an investor to purchase or hold a security

*Risk-Free Rate of Return*- interest rate of Treasury bills

*Risk Premium*- additional rate of return above the risk-free rate we expect for assuming risk

*Capital Asset Pricing Model (CAPM)*- the expected rate of return is a function of (1) the risk-free rate, (2) the investment's systematic risk, and (3) the expected risk premium

*Security Market Line*- the return line that reflect an investor's required rate of return for a given level of systematic risk

### Formulas

**Nominal Risk = (1+ Real)(1+ Expected Inflation)-1**

Example:

Real Rate= 4.5%

Expected Inflation= 7.3%

$(1+.045)(1+.073)-1=.12128$  or 12.13%

**Standard Deviation=  $\sqrt{(\text{Rate of Return}- \text{Expected Rate})^2(\text{Probability})+\dots}$**

Example:

<u>Probability</u>	<u>Return</u>
.15	-1%
.30	2%
.40	3%
.15	8%

Expected Rate= 2.85%

STDEV=  $\sqrt{(-.01-.0285)^2(.15)+(.02-.0285)^2(.3)+(.03-.0285)^2(.4)+(.08-.0285)^2(.15)}$   
Standard Deviation= 2.54%

**CAPM= Risk Free Rate + Beta(Risk Premium\*)**

\*Risk Premium= Market Rate - Risk Free Rate

Example:

Beta= 1.2

Risk Free Rate= 6%

Market Rate= 16%

CAPM=  $.06+1.2(.10)$

CAPM= 18.00% (which represents the investor's required rate of return for this security)

## **The Personal Auto Policy**

### **Background Information**

- Standardized format created by ISO (Insurance Services Office) and used by most insurance companies
- Six Parts
  - Liability: Bodily Injury and Property Damage
  - Medical Payments
  - Uninsured/ Underinsured Motorist Coverage
  - Damage to your Vehicle: Collision and Comprehensive
  - Duties after an Accident
  - Loss and General Provisions
- Prior to purchasing insurance, you must give careful consideration to the service, level of protection, price, and credit rating of the insurance company.
- PAP- first introduced in 1977, standardized contract written in simple language so that it is easy to understand

### **Sections of PAP**

- Declarations Page- Front page, name and address of the insured, description of vehicles covered, contains information declared by the applicant
- Insuring Agreement- A broad statement of the insurer's obligations as well as the responsibilities of the insured
- Definitions- Glossary of the terms used in the contract
- Conditions- Identifies the conditions when the insurer will have to pay. Auto coverage only applies in the U.S., Canada, Puerto Rico, or U.S. territories and possessions
- Exclusions- Eliminates coverage when insurance would be provided by a different policy, eliminates coverage for insurable events, like acts of war
- Endorsements- Special additions can be added to a PAP through endorsements. Common endorsements include: Fancy speakers, nice wheels, PIP, towing/rental, etc.

### **Who can purchase auto insurance?**

- Individuals with families who own or lease (for 6 months or more) a private passenger vehicle.
- Restrictions on trucks or vans. Must weight less than 10,000 pounds and cannot be used for deliveries
- Who is listed on a PAP?
  - Individuals
  - Married couples
  - Unrelated people who live in your house

### **Part A: Liability**

- Coverage that protects others when you are at fault
- Covers Bodily Injury and Physical Damage
- Expressed as either a single limit or a split limit
- Coverage applies when:
  - You or a family member drives your car

- You or a family member drives someone else's car
- A friend drives your car
- You are driving a rental car
- Part A Insurance Liability is primarily on the car. Any insurance that the driver has is considered secondary. This applies when you are driving someone else's car.
- Bodily Injury- Applies to injuries to other people in other cars, pedestrians, bicyclists, and other people in your car
- Property Damage- Covers the property of others
- What vehicles are covered?
  - Vehicles listed on the Declarations Page
  - New vehicles within certain limits
  - A trailer you own
  - A temporary substitute vehicle
- Part A will pay up to \$250 in bail bonds and up to \$200 per day in lost wages if the insured has to go to trial.
- You cannot get Part A on a vehicle with less than 4 wheels or a racing vehicle

#### Part B: Medical Payments

- Covers medical payments for you, your family, or anyone in your car
- You are also covered when you or a family member is riding in someone else's car
- Coverage is NOT based on fault
- Standard limits: \$500, \$1,000, \$2,000, \$5,000

#### Part C: Uninsured/ Underinsured Motorist

- Pays if you are hit by an uninsured driver or the victim of a hit and run
- Also applies if you are hit as a pedestrian
- Limits usually match the Bodily Injury limits stated in Part A
- Must be included unless the insured rejects the coverage
- Coverage applies if you are in your own vehicle or a non-owned vehicle
- Stacked- Part C limits on multiple cars can be combined for extra coverage in case of an accident
- Unstacked- Part C limits on multiple cars are not combined and remain separate in the event of an accident

#### Part D: Damage to Your Auto

- Collision- Covers damage caused by impact with another vehicle or object, or overturn of our vehicle
- Other Than Collision/ Comprehensive- Provides protection from theft, fire, windstorm or hail, flood, falling objects, collision with a bird or animal, and other physical loss  
EXCEPT:
  - Road damage to tires
  - Mechanical breakdown
  - Wear and Tear
- No limit, the amount received is the actual cash value of the car or the cost to repair it
- Insurance companies will determine the value by comparing your car to the value of similarly equipped vehicles

- Deductible- An amount you must be responsible for when you have a loss
  - Common deductibles: \$100, \$250, \$500
- Part D is NOT required. One might opt out if they have an old car with a low value

### Part E and Part F: Duties After and Accident and Loss and General Provisions

- When you have a claim you must:
  - Notify the company of when and where the accident happened, including names of any people injured or witnesses to the accident
  - Cooperate with the insurance company as they attempt to settle your claim
  - Notify the police if struck by a hit-and-run driver
  - Allow the insurance company to inspect the damage to your auto before it is repaired
- You can cancel your insurance at any time by notifying the company or your agent
- The insurance company can cancel your insurance if they notify you in writing. They will do this:
  - When you fail to make premium payments
  - When you have your license suspended or revoked

### **Determining the Price of Personal Auto Insurance**

- In most states it is against the law to operate a motor vehicle without insurance
- The underwriting process is one of the most important processes an insurance company completes

### How an Insurance Company Decides Who to Insure

- They interview each applicant to determine if the person fits the company's profile.
  - They will not sell policies to individuals who suffer from higher-than-average losses
  - Applications, opinion of agent/ CSR/ interviewer
  - Driving experience, tickets, accidents, age and type of vehicle, vehicle use, etc.
- Applications are then reviewed by an underwriter.
  - Underwriting- the process an insurance company uses to determine who will be offered an insurance policy and at what price
  - Underwriting guidelines detail the company's criteria for acceptance or rejection of an applicant
  - Underwriters use the guidelines in addition to his or her sound judgement
- Sometimes a risk that appears to be unacceptable could be made acceptable if it was modified.
  - If a person has a number of relatively small claims, they could accept a higher deductible

### How an Insurance Company Determines the Price of Insurance

- Insurance companies use the services of an actuary.
  - Actuary- one who has received years of specialized training in mathematics and statistics and has been certified by the Casualty Actuarial Society

- Actuaries review the past loss history of a group of people, look at their risk characteristics, make projections about the future, and develop a rate that the company will charge for all customers who have similar risk factors
- Rate must be sufficient for the company to pay its claims in the future, pay its expenses, and make a reasonable profit
- Insurers use the law of large numbers to estimate the losses a certain group of insureds may have in the future.
  - Using statistics, the actuary looks at losses that have occurred in the past and determines that approximately 2% of policyholders will have a claim.
  - The other thing the actuary must determine is the average cost of claims over time, or loss severity.
  - The law of large numbers states that as the number of policyholders increases, the more assured the company can be that the actuary's prediction will turn out to be true.
  - The law of large numbers benefits policyholders by allowing them to transfer their risk of loss to the insurance company
- Insurance rates are not the same as premium.
  - An insurance premium is a payment that is made by the owner of the policy to the insurance company.
  - An insurance rate is the price of insurance for each unit of coverage
    - Units- limits contained in the policy of the number of items exposed to loss
- The first thing an insurance company does to determine a premium is to establish a base rate
  - Base rate- established rates for certain levels of coverage and for the number of insured units
  - All individuals who possess the same risk characteristics pay the same rate, although the premium will vary based on the number of units insured.
  - Units may also be the amount of insurance selected
  - One important feature of rates for liability insurance is that they increase at a decreasing rate as you get higher and higher limits. This is because large claims are not as common and smaller claims.
- When an actuary develops rates, he or she takes into consideration all of the relevant risk factors.
  - Thus, if male drivers have, on average, more accidents than female drivers, the rate charged will be higher for boys than for girls.
  - Rates vary on the likelihood that the insurance company will have to pay claims.
  - Insurance rate-making is objective since it is based on the analysis of statistics.
  - Underwriting is subjective because it allows an underwriter to use judgement.
- Most insurance rates are called class rates.
  - The insurance company has divided customers into classifications based on their risk characteristics.
  - Within each class, everyone pays the same rate.

Determining Classifications

Primary Factors

1. Age, gender, marital status
2. Annual miles
3. Use of Auto
4. Driver training/ Good student
5. Driving Records

Secondary Factors

1. Age, make, and model of auto
2. Number of autos
3. Territory- garaging location of autos

Other Factors

1. Limits of liability
2. Deductible
3. Discounts

- Uses of the Vehicle
  - Business Use
  - Farm Use
  - Pleasure Use
  - Work less than 15 miles
  - Work 15 or more miles

<b>Factors that Impact the Cost of Insurance</b>		
<b>Risk Factor</b>	<b>High Risk</b>	<b>Low Risk</b>
Age of Driver	Under 18	Over 25
Number of year driver is licensed	Under 3	3 or more
Gender of driver	Male (youth)	Female
Marital Status	Single	Married
Driving Records	Tickets/Accidents	Clean record
Where vehicle is usually driven	Congested Urban	Farm
Annual Miles	Over 20,000	Under 7,500
Vehicle Use	Business	To/From school under 3 miles
Vehicle Type	SUV/Sports Car	4-Door Sedan
Safety Devices	Seat belts	Airbags
Relationship to Vehicle	Owner	Occasional User

- When calculating final insurance premiums, primary rates are added to secondary rates and multiplied by the base rate.
  - Base Rate x (Primary + Secondary) = Premium
- Over the past several years, there has been more public debate with regard to some of the rating factors.
  - It is unfair to discriminate against uncontrollable factors like gender and age.
  - Some states have passed laws that severely limit an insurance company's use of various factors in determining the rates for insurance.

### Controlling Risk Factors

- Since lower risk means lower premiums, it is important that you do everything possible to reduce or eliminate the chance that you will have a claim.
  - Obey traffic law
  - Use public transportation
  - Maintain a "B" average in school

### Where the Insurance Premium Dollar Goes

- Some people think insurance is a "rip off" because they believe insurance companies charge excessive premiums and earn high profits.
  - Nearly 70% of every dollar in premiums is returned to policyholders in the form of claim payments.
  - About 28% is used for the company's expenses
  - Only 2% is profit (some agencies make more)
  - An underwriting loss takes place during unusual events like natural disasters
  - The company's investment income can be used to offset losses if claims exceed the company's expectations.
    - Common investments are low-risk securities like U.S. Treasury notes and bonds.

### **Insurance Practice Notes**

1. Actual Cash Value (ACV) is more common than Replacement Value (RV) which provides a brand new car after an accident
2. Indemnification- restores vehicle to condition or value before the accident
3. Collision and Comprehensive Coverage
  - a. You can get Comprehensive alone
  - b. If you get Collision, you have to get Comprehensive, too.
4. AM Best- Company that rates the financial strength of insurance companies
  - a. Can they pay their claims?
5. PIP- Personal Injury Protection
  - a. 80% Bodily Injury
  - b. 60% Wage Loss
  - c. 100% Miscellaneous (ex. House work)
6. JUA- Joint Underwriters Association
  - a. Insurance market for people who are too risky

- b. Maximum rates: 100/300/50
7. PIP has \$5,000 death benefit in addition to Part B
  8. Minimum Part C coverage is \$20,000 (like that of minimum Bodily Injury in Part A)
  9. Who pays first?
    - a. Worker's Compensation, PIP, Part B, Part C
  10. PIP does not cover motorcycles
  11. Out of state, PIP only covers you in your car or a resident relative's car, not pedestrians or rental cars.
  12. Medical payments are redeemable until 3 years after the accident.
  13. PIP can exclude Wage Loss Compensation
  14. Medical Payments are per person per accident
  15. Part A includes tort liability (defense costs)
  16. Loss Payee (lender, ex. bank) is determined on the Declarations Page
  17. Insurance will defend the insured without his or her permission.
  18. The lowest possible single limit is \$30,000.
  19. Property Damage is defined as "physical injury to tangible property"
  20. Liability covers people in your car if you're at fault
  21. If you have Collision and Comprehensive, you have 2 weeks to report a new car to the insurer. If you don't, you are only covered for 4 days after the purchase.
  22. Non-stacked rates cost less than stacked rates.
  23. "You" is you and your spouse.
  24. You can't purchase Part C coverage greater than Part A Bodily Injury limits
  25. PIP deductibles only apply to the insured.
  26. There is a 48-hour waiting period for rental coverage benefits if a vehicle is stolen
  27. Part D follows you and your family
  28. If a vehicle is damaged in transit, it is covered if both endpoints are in covered territories. (check Conditions)
  29. Part D covers owned and non-owned vehicles
  30. Part C is excess to all other benefits
  31. PIP is tied to the driver while tort exemption is tied to the vehicle (because it is included in Part A)
  32. Part D covers \$1,000 of sound equipment if it's installed in the car where the manufacturer did not intend it to be installed.
  33. PIP is verified whenever a vehicle is registered or registration is up for renewal.
  34. No-Fault Law excludes public school buses, taxis, and limousines (of the eligible vehicles with 4 wheels)
  35. PIP follows you in a rental car only if you are driving in-state
  36. Company cars can be an endorsement on a PAP called Extended Non-owned Coverage

## **Bond Valuation**

### **Vocabulary**

*bond*- long-term debt investment; usual maturity of at least 10 years, borrower makes interest payments and returns the principal at maturity

- *Treasury Bond*- bonds issued by the federal government; “no-default risk”; prices decline when interest rates rise
- *Corporate Bonds*- issued by corporations; default risk is credit risk; different levels of default risk depending on the company’s characteristics
- *Municipal Bonds*- issued by state or local governments; some default risk; exempt from most federal and state taxes
- *Foreign Bonds*- issued by foreign governments; default risk if the government’s financials aren’t sound

*Fixed-rate bonds*- a bond whose interest rate is fixed for its entire life

*Indenture*- bond contract

*Floating-rate bond*- a bond whose interest rate fluctuates with shifts in the general level of interest rates; sometimes have high and low caps; tied to a published interest rate

*Rate band*- minimum and maximum boundaries for interest (annual or total)

*Call provisions*- a provision in a bond indenture that gives the issuer the right to redeem the bonds under specified terms prior to the normal maturity date

- Bonds are called to reduce liability or to stop paying excess interest- known as the refunding operation.

- A call provision adds reinvestment risk to the bonds.

*Reinvestment risk*- risk assumed by the investor that he/she won’t be able to find a similar risk investment that pays the same rate as before the bonds was called

*Deferred Call*- bonds that are not callable right away

*Sinking Fund provision*- a provision in a bond contract that required the issuer to retire a portion of the bond issue each year

- The company can do this by either calling the bonds back or buying them back in the secondary market.

- If the coupon rate is higher than the market rate, the investor faces reinvestment risk.

- Bonds with a sinking fund provision are less risky than bonds without one.

*Bond Trustee*- third party in bond-issuing process that protect the bondholders and their interest

- Bond trustees often require the issuer to have a sinking fund
- A bond trustee is often a banking institution or a trust company.

*Convertible Bonds*- bonds that are exchangeable into shares of common stock at a fixed price at the option of the bondholder

- Convertible bonds are often more appealing to the investor than non-convertible bonds.

- Convertible bonds often have lower coupon rates than non-convertible debt.  
- A bondholder should convert their bond when the current market price exceeds the conversion price.

- Conversion is not taxable.
- Conversion is a primary market activity.

*Conversion price*- stock price at which point a convertible bond can be exchanged for shares of common stock

*Conversion ratio*- describes the number of shares that the bond can be converted into

*Puttable bonds*- a bond with a provision that allows its investors to sell it back to the company prior to maturity at a prearranged price

- Puttable bonds are the opposite of callable bonds.

*Debenture*- a bond without collateral, unsecured bond

Subordinated debenture- unsecured bonds whose bondholders get paid after debentures

*Mortgage bond*- bond backed by mortgages and their fixed assets

- If there is a foreclosure, the issuer can sell the property.

*Zero- coupon bonds*- discounted bond with no interest

- There is no interest expense for the issuer.
- Bondholders don't pay taxes on interest.
- There is a large cash outflow for the issuer at maturity.

*Junk bonds*- bonds rated BB or lower

- Often, junk bonds are unsecured bonds.
- Due to higher risk, junk bonds tend to have higher coupon rates.