Economics Milestone Review

Unit 1 Fundamentals

Economics – study of how people & societies choose to use scarce resources to satisfy their needs & unlimited wants

- Scarcity is the #1 ongoing problem that all economists face
- In order to be considered scarce, a good or service must be (1) limited, (2) desirable, (3) have a price/cost
- Scarcity affects the choices of both the **consumer** (person who buys goods & services for personal use) & the **producer** (person who makes goods or provides services)

Factors of production – economic resources needed to produce goods and services (**productive resources)**

1) **Land** – includes all the **natural resources** found on or under the ground that are used to produce goods and services (raw materials)
   - water, forests, wildlife, minerals, oil
2) **Labor** – all the human time, effort & talent that go into the making of products
   - workforce
3) **Capital** – all the resources made and used by people to produce & distribute goods and services
   - Physical capital: tools, machinery, factories, airplanes, offices, warehouses
4) **Entrepreneurship** – combination of vision, skill, ingenuity & **willingness to take risks** that is needed to create & run new businesses
   - innovators, inventors, "risk takers"

Marginal Costs and Benefits - practice of examining the costs & expected benefits of a choice as an aid to decision making is called **cost-benefit analysis** **("Thinking at the Margin")**

- **Marginal cost** is the **cost** of using **one more unit** of a good or service
- **Marginal benefit** refers to the **benefit or satisfaction** received from using **one more unit** of a good or service
- **Utility** – benefits or satisfaction gained from the use of a good or service
- **Law of Diminishing Marginal Utility** states that the **marginal benefit** from using **each additional unit** of a good or service during a given time period **tends to decline** as each is used

"THERE IS NO SUCH THING AS A FREE LUNCH!" (TINSTAAFL)

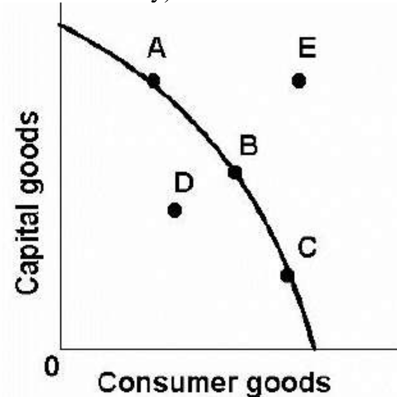
There's ALWAYS a COST!

- The alternative you give up when making an economic choice is called a **trade-off**
- **OPPORTUNITY COST** of an economic decision is the **value of the next-best alternative** over another (#1 trade-off)

Production Possibilities Curve (PPC) – graph used to illustrate the **impact of scarcity** on an economy by showing the maximum number of goods or services that can be **produced** using **limited resources**

- The PPC is based on 4 assumptions:

1. Resources are fixed (no way to increase the availability of factors of production)
2. All resources are fully employed (no waste resources; economy is at full production)
3. Only 2 things can be produced (capital & consumer goods)
4. Technology is fixed (no technological breakthroughs to improve methods of production & efficiency)



- PPC shows that **nothing is free** & **everything has an opportunity cost**, if society wants more of one thing it must give up something in return
- **Efficiency** – condition in which economic resources are being used to produce the maximum amount of goods & services (on the curve – Full Employment)
- **Inefficiency** – condition in which economic resources aren't being used to their full potential (economy in a **Recession**)
- **Law of increasing opportunity costs** states that as production switches from one product to another, increasingly more resources are needed to increase the production of the second product, which causes opportunity cost to rise (reason why the curve is **concave**/bowed & not straight)

3 things that cause the PPC to shift outward (growth)

1. Increase productive resources (F.O.P including **human capital**)
2. New technology & efficiency
3. International Trade

Adam Smith challenged mercantilism (economic system where the gov't controlled trade & favored economic independence) & instead promoted the concept of **free trade** in his book *The Wealth of Nations* (1776)

- ***Laissez-faire*** – economic policy of allowing owners of industry and business to dictate their prices and working conditions without governmental interference (*"allow to do")*

Smith's 3 natural laws of economics:

1. **Law of self-interest** – people work for their own good
2. **Law of competition** – competition forces people to make a better product
3. **Law of supply and demand** – enough goods would be produced at the lowest price to meet the demand in a market economy

Capitalism – economic system in which the **factors of production are privately owned** and money is invested in business ventures **to make a profit**

Fundamentals of Market Economies

1) **Specialization** – people concentrate their efforts in the areas in which they have an advantage; allowing people to trade with the most efficiency
2) **Division of Labor** – separation of tasks so workers perform fewer tasks in order to operate more efficiently
3) **Productivity** – average amount of output (good or service) per unit of labor input

- Means to do more with less
- Capital investments & **technology** allow increased efficiency

1) **Voluntary Exchange** – act of buyers & sellers willingly & freely engaging in market transaction where both parties benefit

Economic System – method used by society to allocate/distribute the scarce resources in order to bring goods and services to the people

- All economic systems must answer the 3 basic questions:
  1) **What** to produce?
  2) **How** to produce?
  3) **For whom** to produce?

1. **Traditional economy** – relies on habit, custom, or ritual to decide the 3 economic questions

2. **Market economy** – economic decisions are made by buyers & sellers trading freely

❖ Advantages
  1) Ability to adjust to change based on consumer demand & producer supply
  2) Ability to have a voice in the economy
  3) High degree of individual freedom
  4) Limited gov't involvement
  5) Variety of goods & services created
  6) High degree of consumer satisfaction

❖ Disadvantages
  1) Inability of the market to meet every person's basic needs
  2) Inadequate job of providing some highly valued services like justice, education, infrastructure, & health care
  3) Citizens may face a level of uncertainty & the prospect of economic risk, loss, & failure

3. **Command Economies** – in a centrally planned economy, the central government decides how to answer the three economic questions (**Socialism & Communism**)

❖ Advantages
1) Ability to drastically change direction in a relatively short period of time
2) Little uncertainty for its citizens because workers are forced into state sponsored labor

❖ Disadvantages
1) Citizen **needs** may not be met: starvation, poor healthcare, lower standard of living
2) Consumer wants aren't met since consumer goods aren't produced
3) Hard work isn't rewarded/no worker incentives
4) Individual initiative goes unrewarded
5) Citizens have very few rights, liberty, & freedoms
6) Bureaucracy delays decisions that need to be made & little flexibility to deal with day-to-day problems

4. **Mixed Economies** – market-based economy in which government plays a role in the market to help with poverty, unemployment, public safety, health care, education, etc.

- Most modern economies are mixed economies (U.S., Japan, England)

❖ Advantages
1) Gov't is still limited in scope
2) Provides freedoms & benefits: Free Enterprise/Business Ownership, Social Welfare, Profit Earnings, & Political Freedoms
3) Gov't is active in economy & provides support & direction

❖ Disadvantages
1) Depends on how "mixed" the economy is

Socialism – political & economic system in which the gov't controls the means of production to distribute among the community as a whole to prevent economic & social suffering

Communism – absolute socialism advocating a classless society and all property is publicly owned and each person works & is paid according to their abilities & needs (**MARXISM**)

Advantages of a Free Enterprise System

1. **Economic Freedom –** Individuals' right to choose your occupation & what to buy
2. **Private enterprise** – business or industry that is managed by independent companies or private individuals rather than by the state (private ownership)
   - **Patents** - set of exclusive rights granted by the gov't to an inventor for a limited period of time in exchange for detailed public disclosure of an invention
3. **Private Property Rights** – Individuals & businesses own property; have the right to buy and sell as much property as they want with limited gov't interference
4. **Competition** – efforts among sellers/producers to attract consumers at various prices
5. **Profit Motive** – force that **incentivizes** people & organizations to improve their material well-being by being monetarily rewarded for innovations, efficiency, and entrepreneurship
6. **Consumer sovereignty** – the desires & needs of consumers control the output of producers

Role of Government in a Market Economy

- Government acts an **informer**, **protector**, **provider**, and **regulator**
- Government has the responsibility to protect property rights, inform the public and oversee business activities
- **Public sector –** part of the economy that involves the goods provided by the government
- **Private sector** – part of the economy that involves the goods provided by private firms
- **Public Good/Service** – shared good or service for which it would be impractical to make consumers pay individually and to exclude nonpayers (gov't provided)
  - Education, Military, National Park, Police, Infrastructure (Highways, Bridges, etc.)

- **Redistribution of Income** is when the **gov't takes** from one group & **reallocates** to another group
- **Transfer payments** – transfers of income from one person or group to another even though the receiver does not provide any goods or services in return
  - Welfare, Social Security, etc.
  - **Safety net** – gov't programs designed to protect people from economic hardships

- **Externality** – side effect of a transaction that affects someone other than the producer or buyer
- **Negative Externality** – negative effects experienced by people that had no part in the consumption of a good or service
  - Secondhand smoke, chemical waste dumping, foreclosures & property values
- **Positive Externality** – Goods/services that generate benefits to many people, not just those who pay for the goods
  - Education, better technology, medicine, **infrastructure**, etc.
  - **Subsidy** – gov't payment that helps cover the cost of an economic activity that's considered to be in the public's best interest

Economic and Social Goals of a Market Economy

1) **Economic Freedom** – freedom to buy or sell what we want, make choices with little interference by the government
2) **Economic Efficiency/Innovation** – making the most of scarce resources, using your resources wisely and productively by improving upon existing technology
3) **Economic Growth** – improving the economy from year to year, improving people's standard of living
4) **Full Employment** – highest amount of the labor force that could be employed within an economy at any given time (95% employment rate)
5) **Economic Security** – government will provide a safety net in times of economic downturns
6) **Economic Predictability/Price Stability** – knowing that goods & services will consistently be available at stable prices
7) **Economic Equity** – Fair work for fair pay; being paid according to your skill level

Unit 2 Personal Finance

Incentives are things (rewards & punishments) offered to you to help in the decision-making process.

Cost-Benefit Analysis – analysis the marginal cost and benefits of every decision based on incentives (rational decision making)

- If **MB > MC** then do it!
- If **MB < MC** then it's probably not the best choice to make

Financial Institutions and Investments

1. **Commercial banks**: financial institutions that **receive deposits** of money**, extend credit**, and **provide loans**.
2. **Credit unions**: are cooperative associations that serve only their members. They offer checking and savings accounts, as well as grant loans.

- **Interest rates on loans are usually lower at a credit union than at commercial banks, but you must be a member of that credit union**

How do banks make money (profit)? **Making loans and charging Interest Rates**

- **Fractional Reserve Banking** is when banks hold only a small portion of deposits to cover potential withdrawals and then loans the rest of the money out.
- To avoid a **BANK RUN** the **Federal Reserve** (US central bank) mandates that all banks hold a certain amount of money in their reserves called the **Reserve Ratio** (currently 10%)
- Banks can literally *"make money appear out of thin air!"* using the **money multiplier**

$$\frac{1}{\text{Reserve Ratio (RR)}}$$

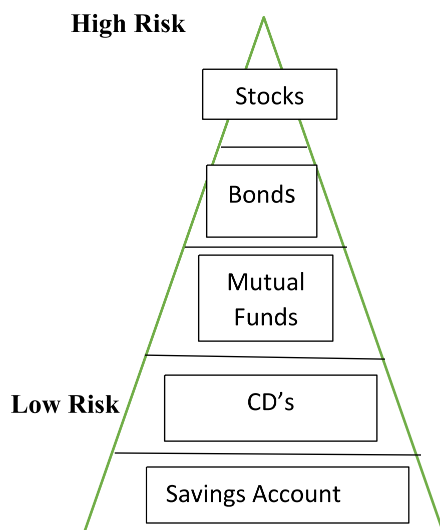
Why should you invest?

- Retirement
- So your money is making an "income" due to **compounding interest**

Risk and Return have a direct relationship. The riskier the investment, the higher the rate of return possible. Investor assumes a greater risk that a portion of or all of the money invested could be lost.

Investments from Riskiest to Least Risky

1) **Stocks** – shares in a company that an individual/organization purchases, giving that person /entity part ownership
2) **Bonds** – loans to either a company or the gov't (I.O.U.'s with interest)
3) **Mutual Funds** – pool money from a number of investors to buy a range of investments: stocks, bonds, short-term money-market instruments, or other securities (diversified portfolio
4) **Certificates of Deposit (CDs)** – timed savings account that pays higher interest rates than savings but charges penalties for early withdrawal before maturity
5) **Savings Account** – Income that is not spent on consumption but is put aside (very low interest rate; more of a holding account than anything)



Taxes and 3 Types of Tax Structures

1. **Progressive Tax** – % of income paid in taxes increases as income increases
   - More you make, more they take, **so wealthy bear the burden**
   - **Federal Individual Income Tax**
2. **Proportional Tax –** % of income taxes remains the same for all income levels (Flat tax)
   - Everyone pays the same %, so no one bears the burden
   - Sales Tax
3. **Regressive Tax** – % of income paid in taxes decreases as income increases
   - More you make, less they take, so **lower income earners bear the burden**

- **Sales Tax** – a general state or city tax levied on a product at the time of sale
- **Sales Tax affects lower income groups more than higher income groups (regressive tax)**

Credit – an agreement under which a buyer receives goods and services at the present time in exchange for a promise to pay for them at a future time

- **Principal** – amount of money that has been borrowed (**original debt amount**)
- **Interest** – amount of money that a lender charges a borrower in exchange for the use of their money
  - **The cost of credit is INTEREST**!

Credit Cards v. Debit Cards

- When you use a **credit card**, you are **borrowing money from the credit issuers as a loan that you will pay back with interest**
- **APR** is the **annual percentage rate** that is charged for borrowing; these rates vary (usually 10%-20%) and can dramatically increase if you are late or miss a payment

- When you use a **debit card**, you are **using your own money from your banking account**, so **there is no interest**
  - But remember that you must have the money in your bank account, or you could be penalized with bank fines

Simple v. Compound Interest

- **Simple Interest** – is a rate that is **applied only to the value of the principal**
  - Simple interest grows slowly
- **Compound Interest** – is **interest applied to both the principal and the interest**
  - You pay interest on interest; so compound interest grows fast

What are some factors that affect Credit Worthiness?

1. **Credit History**

- **Debt** is the amount of money that you owe a lender from borrowing
- **Credit score** is a number based on your history as a borrower; bad debt damages your credit score
- **Credit worthiness** is when a lender uses your credit score to determine what type of loan you can receive
  - ➢ If your credit score is **high,** lenders will loan you money at a lower interest rate (600-800)
  - ➢ If your credit score is **low,** lenders will loan you money at a higher interest rate (599-499)

2. **Employment (Income)**
   - ➢ How much money you make determines loan amount since you must be able to prove you have the ability to pay back the loan
3. **Education**
   - ➢ Higher your education level, the more credit lenders make available to you (**human capital matters**!!!)
4. **Age**

Types of Insurance

- **Insurance** – money paid to an insurance company for assurance that, if what they value is lost or damaged, the insurance company will pay for their loss

1. **Automobile – covers cars (vehicles)**

- Costs-determined by the type of car, driver experience, driver age, driver's education/grades, driver's city of residence, mileage driven
- Paid monthly, quarterly, every 6 months or yearly

2. **Health – covers doctor visits, prescriptions, and other medical costs**

- Paid monthly
- Different prices determined by different plans for different services/copays/coverages
  - ➢ **Premiums:** payment for insurance
  - ➢ **Deductibles**: dollar amount of expenses that must be paid out of pocket before an insurer will pay any expenses for loss or liability
    - ▪ **High premium = low deductible**
    - ▪ **Low premium = high deductible**

3. **Life – provides money to the beneficiary in the case of death**

- Costs-determined by the age of the insured and amount to be paid at death
- Paid premium monthly

4. **Disability** –covers income if you are unable to work for short or long periods of time

- Costs- determined by salary, and benefit if you are out of work
- Paid monthly premium

5. **Property – covers property, land, homes**

- Costs-determined by how much the property is worth, credit score, and location

Human Capital

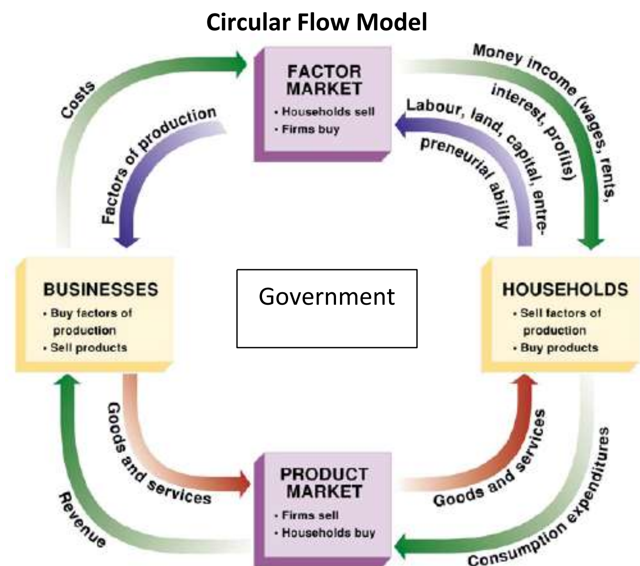
- **Significance of Investing in education, training, and skill development**
- **The more education/training the more money you will make and the greater quality of life you experience**
- **If you possess a skill no one else does you will be able to command more money for that skill and have greater job security**

Unit 3 Microeconomics

Microeconomics - interaction between households, businesses, and government in the markets

- **Household** – Individuals who **"demand"** goods & services for **utility** as **consumers**
- **Firm** – business organization that use productive resources to **"supply"** goods & services, which it then sells for a **profit** (Entrepreneurs)
  - ➢ **Suppliers** transform **"inputs"** (F.O.P.) into **"outputs"** (products)
- **Factor Markets** – markets where productive resources (F.O.P) are bought & sold
  - ➢ **Households are sellers of resources to earn an income & Firms are the buyers of Land (rent), Labor (wages), and Capital (interest)**
- **Product Markets** – markets where finished goods & services are bought & sold
  - ➢ **Firms sell their goods & services (products) to earn revenue and make a profit to Households who consume goods & service for utility (happiness!)**

Circular Flow Model



Money serves as the **MEDIUM of EXCHANGE** in a Market Economy & these transactions always occur because of **voluntary exchange**

Demand

Demand – ** amount of a good or service that a consumer **DESIRES and is **WILLING & ABLE** to buy at **various (all) prices** during a given time period

Quantity Demanded (Qd) – amount of a good or service a consumer is willing & able to buy at **EACH PARTICULAR PRICE** during a given time period

- **Price always changes Qd (movement along the curve) but never changes Demand**

LAW OF DEMAND states that when the price of a good or service falls, consumers buy more of it (vice versa)

- **INVERSE RELATIONSHIP** (opposite) between **PRICE & Qd,** so the more something costs the less quantity people will buy

↓ **Price** = ↑ **Qd** or ↑ **Price** = ↓ **Qd**

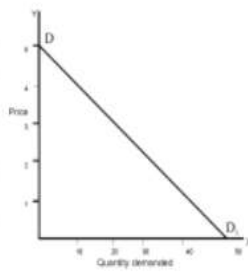
Demand Schedule shows the relationship between price & Qd; **Demand Curve** shows the same info & the curve **ALWAYS SLOPES DOWNWARD!**

- **Demand goes Down to the DIRT!**

Demand schedule

Price (Rs)	Quantity Demanded (Units)
5	10
4	20
3	30
2	40
1	50

Demand Curve



3 Reasons Why Demand Slopes Down

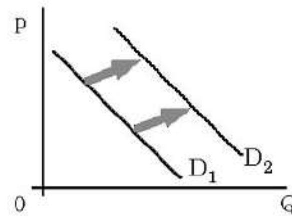
1) **Income Effect/Price** – the change in consumption resulting from a **change in price**,
- Consumers **feel richer when prices drop**, **poorer when prices rise** ("more bang for your buck")

1) **Substitution Effect** – people will **substitute** a similar, lower-priced product for a relatively more expensive one

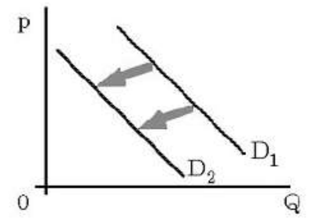
2) **Diminished Marginal Utility** – more of a product you use, the less **utility** (satisfaction) you'll get from each unit over a given time period

Changes in Demand are reflected as a shift in the curve

- Shifts to the **RIGHT** indicate an **INCREASE in demand**
- Shifts to the **LEFT** indicate a **DECREASE in demand**



An increase in demand



A decrease in demand

revisionworld

5 Determinants ("Shifters") of Demand

1) **Consumer Income**
- Demand increases for **Regular Goods** if income levels are high and decrease for **Inferior Goods** and vice versa if income levels decrease

2) **Consumer preferences/tastes**
  - Advertisement & Popularity

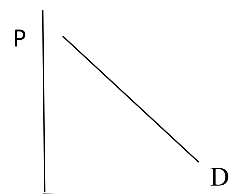
3) **Consumer expectations**

4) **Market size/Population**
  - Demand increases if the market size increases & vice versa

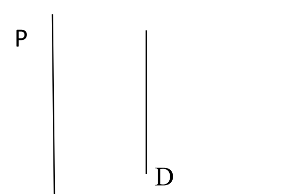
5) **Prices of related products**
- **Substitute Goods have an inverse relationship**
  - Substitute a cheaper product like Almond Milk or Juice if Cow's Milk is too expensive
- **Complementary goods have a direct relationship**
  - If peanut butter becomes less expensive, then the demand for a complementary good such as jelly increases (vice versa)

Elasticity of Demand is the degree to which changes in a good's price affect the quantity demanded (Qd)

- **Elastic Demand** exists when a **small change in a good's price** causes a **major, opposite change in Qd**
  small price increase = a **LARGE** drop in QD



Q of soda
(Elastic)



Q of Insulin
(Inelastic)

- **Inelastic Demand** – demand for a good or service are **unaffected** when the price of that good or service changes

Determinants of Elasticity

1) Necessities v. Luxuries (Need v. Want)
- Medicine such as insulin for diabetics is inelastic because it's life or death

2) Existence of Substitutes
3) Proportion of Income: % of a person's total budget used to buy the good
- That's why items like salt, rubber bands, paper clips, etc. are inelastic

4) The time allowed to adjust for the price change
- More time allowed, the greater the elasticity; like gasoline

Elastic Demand / Inelastic Demand

1. Luxury items / Necessities
2. Substitutes / No Substitutes
3. Expensive items / Inexpensive items

If **Total Revenue** increase after a price increase, the demand is INELASTIC

Supply

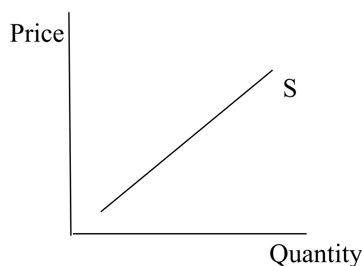
Supply is the quantity of goods & services that producers (firms/businesses) are **WILLING** to offer at **ALL** possible prices during a given time period

Quantity Supplied (Qs) is the amount of a good or service that a producer is willing to sell at **EACH PARTICULAR PRICE**

LAW OF SUPPLY – states that producers **supply more goods & services** when they can **sell them at higher prices** and **fewer goods & services** when they must **sell them at lower prices**

- Producers' actions are based primarily on the pursuit of ***PROFITS!***
- **You make a profit when revenues are greater than the costs of production**

↓ P = ↓ Qs or ↑ P = ↑ Qs (direct)



Supply Curves ALWAYS slope UPWARD
(Supply to the Sky!)

Quantity Supplied (Qs) – A change in the amount a supplier will produce as a result of a change in price
- Reflected as **movement along the curve**

Supply – A change in the amount a supplier can produce as a result of a change in one of the non-price determinates
- Reflected as a shift in the curve

Determinants ("Shifters") of Supply

1) **Prices of Resources/Input Costs**
- Cost of producing the good increases/decreases based on the materials necessary to produce (inputs: land, labor, capital)

2) **Technology/Productivity**
- Technological innovations improve **productivity** & increase ability to supply

3) **Government Tools:**
- **Taxes & Regulations (Negative Impact)**
- **Subsidies (Positive)**
  - **Subsidy** – Gov't payment that helps cover the cost of an economic activity that can benefit the public as a whole
  - Subsidies motivate firms to produce because they are guaranteed revenue from the government (shifts Curve to the RIGHT)

4) **Competition/Number of Sellers in Market**
- Number of sellers – more sellers increases competition & the supply; shifts curve to the right (vice versa)

5) **Business/Producer Expectations**
- Expectations – suppliers inventory will reflect how they view the economy in the future
- Suppliers will increase their inventory if the economy is strong, but reduce inventory if they feel a **recession** is coming

6) **Supply Shocks**
- Supply Shock – a sudden shortage of a good due to a **natural disaster** or **human error**

Make sure you understand the Difference between a Change in Quantity Supplied (Qs) caused by price and a Change in Supply caused by the "shifters"

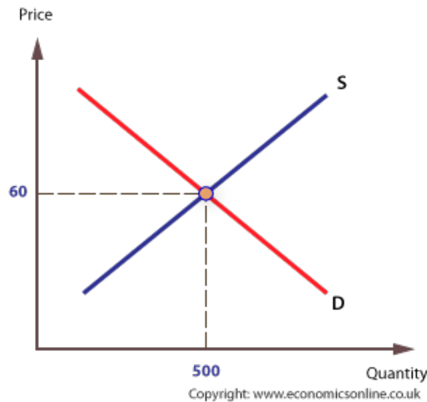
Elastic Supply / Inelastic Supply:
Quickly / Takes Time to Produce
Inexpensively / Cost a lot of Money
Readily available resources / Not Available

LAW of DIMINISHING RETURNS – states that as more of ONE input is added to a fixed supply of other resources, productivity increases up to a point; but at some point, marginal product will diminish

Profit = Total Revenue – Total Costs

Price – the value of a product as established by Supply & Demand
- Prices serve as a link between producers & consumers

Market Equilibrium – the point of balance where Demand & Supply come together (intersect)

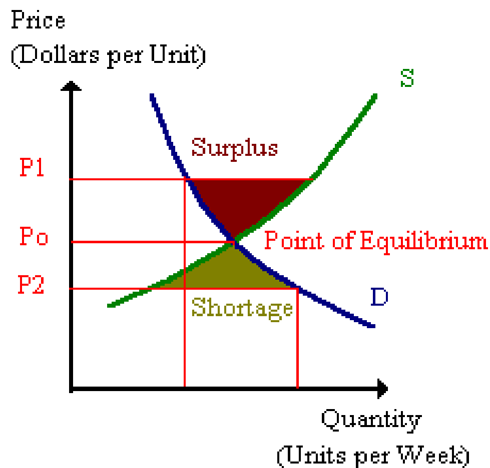


Market clearing price – price that has cleared the market, accepted by both buyers & sellers

- In other words, **QD = QS**

Disequilibrium – occurs when the quantity supplied is not equal to the quantity demanded

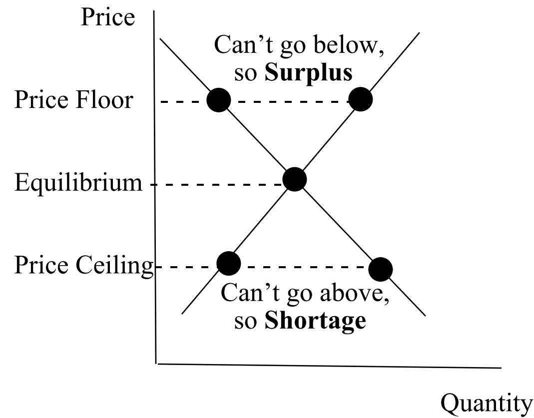
- **Surplus** – result of **Qs > Qd,** usually because **prices are too high**
- **Shortage** – result of Qd > Qs, usually because **prices are too low**



When the Free Market experiences disequilibrium (Surplus or Shortage), a new equilibrium clearing price must be established by producers **decreasing** (if surplus) or **increasing** (if shortage) the price & production

Price Controls:

1) **Price Ceilings** – gov't imposed, legal maximum price that can be charged for a good/service
- **Price ceilings cause a shortage in the amount of the product**
    - Rent control result in appartment shortages
2) **Price Floors** – gov't imposed, minimum price that can be legally charged for a good or service
- **Price floors cause a surplus to occur**
    - **Minimum wage** is a well-known price floor
    - Minimum wage causes a surplus of workers, causing unemployment to rise



Market Structures

1. **Perfect Competition (Pure)** is the simplest & **most competitive** market structure; a large number of firms producing **identical products**

- 4 characteristics:
    - **a) Identical Products**
    - b) Many buyers and sellers
    - c) Market Price (everyone knows the price)
    - d) No barriers to entry
    - No firm can control the price because price is determined strictly by **supply & demand** in the market (**Firms are "price takers")**
        - Examples include fresh produce (fruits & vegetables)

2. **Monopolistic Competition** – many companies selling **similar products** but not identical; **brand control** ("little monopolies")

- 4 Characteristics:
    - a) Many buyer and sellers
    - b) Slight control over price
    - c) **Similar Products (Brand Differentiation)**
    - **main difference between perfect & monopolistic competition**
    - d) Low barrier to entry
        - Examples include fastfood restaurant chains, clothing retailers, etc.

Don't confuse Monopolistic Competition with Monopolies

3. **Oligopoly** – a market structure in which a **few large firms dominate a market**; a few of the largest firms **produce at least 70-80% of the output**.

- 4 Characteristics:
    - a) **A few firms (2-3) dominate the market**
    - b) Identical/slightly different products
    - c) Market Power
    - d) High Barriers to Entry
        - Examples: Automobile industry, commercial airlines, oil cartels, web browsers, smartphones, etc.

Collusion – businesses work together to agree to **price fix**, which **damages the free market** (sell at the same or very similar prices)

- **Cartel – a formal organization of producers that fix prices and control supply**
  - **OPEC**: Organization of Petroleum Exporting Countries

Most U.S. businesses are either **monopolistic competition** or **oligoplies**; and both **practice non-price competition** (using incentives such as free shipping, coupons, rebates, & customer service to gain your business rather than lowering actual prices or price match guanratneeing with competitiors to avoid **Price Wars**)

4. **Monopoly** – when **one company controls the market** of a good/service and can **effectively dictate prices** (least competitive)

- 4 Characteristics:
  - **a) One Seller**
  - **b) No Substitutes**
  - **c) "Price Maker"/Total Market Power**
  - d) Complete Barrier to Entry
    - Examples: Standard Oil in late 1800s

Business Organizations

Business organization (firm) – establishment formed to bring goods & services to consumers in the market

1) **Sole proprietorship – a business owned by one person**

- Most common type of business (75% of all U.S. businesses)
- ❖ **Advantages**
- Easy to start up, manage & dissolve/liquidate
- You keep ALL the PROFITS
- No separate business taxes
- ❖ **Disadvantages**
- **UNLIMITED LIABILITY**
- **Liability** – legal obligation to pay debts/injury settlements incurred by the business
- Difficult to raise financial capital
- Limited managerial experience
- Hard to attract qualified employees
- Limited life of company (dissolves when owner is gone)

2. **Partnership – business owned by at least 2 people**

- Least common business organization (about 5%)
  - General Partnership – each partner is responsible for everything
  - Limited Partnership – some partners are not "active"
  - Articles of Partnership – outline the type of partnership, to the state, between partners.
- ❖ **Advantages**
- Easy to start & easier to manage (partners bring different strengths & expertise)
- Easier to raise financial capital than sole proprietorship
- More efficient operations (larger, more capital & specialization)
- Easier to attract better/qualified employees
- ❖ **Disadvantages**
- Conflict between partners
- **Unlimited Liability** & Limited life of business

3. **Corporation** – business organization **owned by individual shareholders**, each of whom faces **limited liability** for the firm's debt

- Account for 20% of all businesses, but 90% of all products sold
- Considered a separate legal entity (legal being)
- Corporations issue **STOCK** (Shares) to investors (**Shareholders**)
- Shareholders can receive **DIVIDENDS** & are the **OWNERS of the business**, but **face no liability for the firm's obligations**
  - If own the majority (51%) of the stock, then you control the company

- ❖ **Advantages**
- **Easy to raise financial capital by selling stock or issuing bonds**
- Ability to offer higher salaries & greater benefits allows corporations to recruit the best, brightest, most talented, ambitious, and professional employees & managers
- **Limited liability**
- Unlimited life (transfer ownership by selling stock)
- ❖ **Disadvantages**
- Can be difficult and expensive to get **CHARTER** to start corporation
- Shareholders usually have little input in the corporation
- **DOUBLE TAXATION** of corporation profits
- Much more **Government Regulation**

Merger – corporations combine with another company to become one entity

- Horizontal merger – firms in the same market with a similar good or service merge
  - Facebook & Instagram; AT&T & Direct TV
- Vertical merger – firms merge together to control all phases of the product from production to sales

Unit 4 Macroeconomics

Macroeconomics – the study of the entire economy that focuses on 3 components:

1. **Economic Growth/Output** (GDP)
2. **Full Employment** (Unemployment Rate)
3. **Price Levels** (Inflation)

GDP – the **monetary value** (dollar amount) **of all final goods & services produced within a country's national borders in a given time period** (yearly)

- Even if it's produced by a foreign country
- **GDP is the most important indicator of the nation's economy**.
- GDP is a measure of NATIONAL OUTPUT! It's computed QUARTERLY (every 3 months)

Components of GDP (4 sectors of the Economy)

1) **Consumption** – (1) Private sector that includes household consuming goods & services
2) **Investment –** (2) Business sector investing in **capital goods** (grows the economy)
3) **Government –** (3) Public sector: all 3 levels of government revenue from taxation & spending
4) **Net Exports –** (4) Foreign sector includes all consumers & producers **outside** the U.S.

Output-Expenditure Model (**Aggregate Demand**)

GDP = C+I+G+(X-M) or C+I+G+Xn

- **C**onsumption accounts for approximately 70% of GDP in America
- **I**nvestments is about 10-15%
- **G**overnment is nearly 20%
- **Xn** Net Exports is -5% (meaning U.S. has a **trade deficit** & imports more products than it exports)
  - **(X-M) means Exports minus Imports**

GDP Does Not Measure

1. **Intermediate products** – inputs used to produce final goods & services (excludes double counting)
2. **Secondhand sales** – sales of used goods (yard sales, E-bay, Craig's List)
3. **Nonmarket transactions** – transactions that don't take place in the legal market or aren't reported (babysitting, lawn care, home repairs done by homeowner)
4. **Underground economy (**aka: the "**BLACK MARKET**") – market activities that go unreported because they are illegal (illegal drugs, prostitution, stolen goods, gambling)
5. **Transfer payments** – Gov't redistribution money programs (social security, welfare, entitlements)

GDP ***does not*** tell what is produced & does not indicate the country's **quality of life**

Nominal GDP – GDP measured in current prices **not adjusted for inflation**

Real GDP – GDP expressed in fixed unchanging prices, **adjusted for inflation**

Nominal GDP is the **price**, which will continue to rise yearly due to **inflation**, while Real GDP is the actual **outputs**. To find real GDP you calculate the increase in prices using the GDP deflator formula:

Real GDP = nominal GDP/ (price index/100)

Disposable Income (DI) = the money you actually have to spend, after taxes.

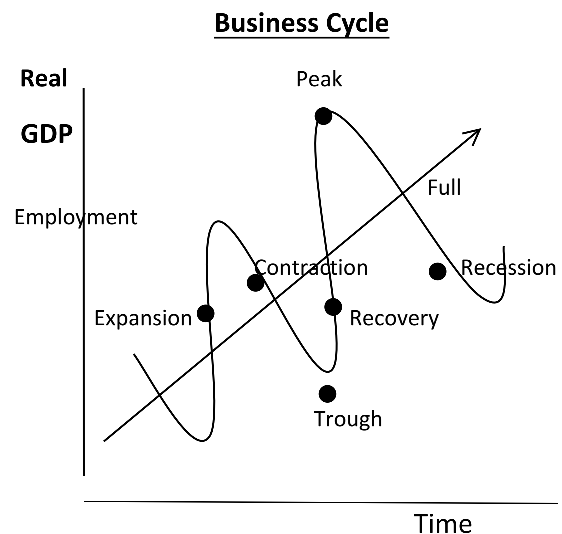
Real GDP per capita is real GDP divided by the total population & reflects each person's share of real GDP. This is the **usual measure of a nation's standard of living.**

Business Cycles – economy-wide fluctuations in a market or economy over several months or years

4 Phases of the Business Cycle

1. **Recovery/Expansion** – period of economic growth as experienced by real GDP
2. **Peak** – when real GDP stops rising
3. **Contraction/Recession** – economic decline marked by falling real GDP (unemployment rate increases)
4. **Trough** – economy reaches its lowest point, real GDP stops falling; "bottomed out"

Business Cycle



RECESSION is a **decline in REAL GDP for 2 or more consecutive quarters** (6+ months)

DEPRESSION is a prolonged and severe recession

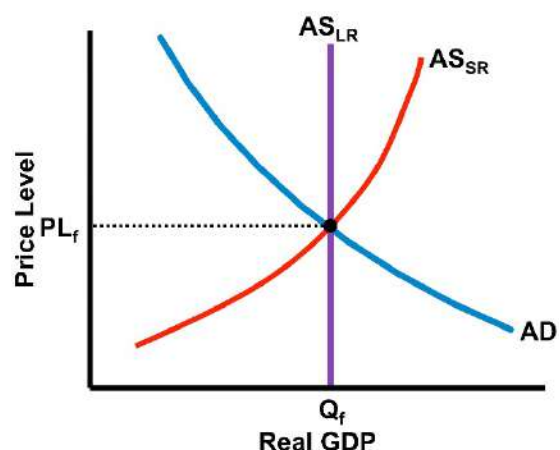
4 Things that influence Business Cycles

1) **Business Decisions** – investments in physical capital, inventory adjustments
2) **Interest Rates & Credit** – easy money v. tight money (low or high interest rates)
3) **Producer/Consumer Expectations** – consumer & producer confidence in the economy
4) **External Factors/Supply Shocks** – oil prices, politics, war, natural disasters

- Economic growth is a sustained increase in an economy's real GDP
  - Raises the **Standard of Living**
  - Lowers Unemployment rate
  - Reduces Gov't transfer payments
  - Increases the tax base &
  - Increases wages due to competition for labor

- **Aggregate Demand (AD)** – the total amount of goods & services that households, businesses, government, and foreign purchasers will buy at each & every price level
  - **$AD = C + I + G + X_n$**
- **A change in any one of the 4 components will cause the AD curve to shift right (increase) or left (decrease) and impact the macroeconomy**

- **Aggregate Supply (AS)** – the total amount of goods & services that producers will provide at each & every price level
- **A change in (1) input costs, (2) productivity/technology, or (3) business taxes/regulations/subsidies will cause the AS curve to shift right (increase) or left (decrease)**



Long-run Aggregate Supply (LRAS) is the vertical line where AD and AS intersect at the equilibrium and **demonstrates an efficient economy operating at full employment (95%)** or at the **natural rate of unemployment (5%)**

- LRAS is the same line as the PPC outward curve and Business Cycle growth tend line, which shows an economy at **sustainable full employment**
- Any point or movement inside, below, or to the left of the line shows a **recession;** and any point outside, above, or to the right shows **economic growth** but **inflation**

Unemployment

Labor force is the total number employed + unemployed adult workers

- Labor Force Includes:
  - 16 years or older
  - Not in the military
  - Not institutionalized (not in jail, assisted living, etc)

- Those considered Employed
  - Worked for pay or profit 1+ hours weekly
  - Worked without pay in a family business for 15+ hours
  - Have jobs but didn't work due to illness, weather, vacations, leave of absence (maternity), or labor disputes

If you're not employed by these standards and *ACTIVELY LOOKING* FOR WORK within the past 4 weeks, then you are considered UNEMPLOYED!

Unemployment Rate – percentage of people in the CIVILIAN labor force who are unemployed

Unemployment rate doesn't include those who have given up looking for a job (dropped out **discouraged workers**), those who don't want a job, and those **underemployed** (overqualified for their job or working part-time when seeking full-time employment.

Natural Rate of Unemployment (NRU) is 5%

4 Types of Unemployment

1. **Frictional** – caused **by movement in the economy** & is always present, resulting from

temporary transitions made by workers & employers

- It means workers have choices: changing jobs, looking for your first job out of high school or college, or a stay-at-home parent goes back to work

2. **Seasonal –** occurs as a result of **seasonal change** or when industries slow or shut down for a season

- Lifeguards or Six Flags workers in the summer, Christmas holidays, etc.

3. **Structural** – jobs that are **permanently lost due to changes in technology** (workers replaced by increases in technology), outsourcing jobs to other countries, consumer tastes, or in the way the economy is structured & not coming back

- Workers being replaced by machines

4. **Cyclical** – rises during **recessions** & economic downturns due to swings of the business cycle

- Most harm unemployment; government tries to help out with fiscal policy & the Fed uses monetary policy to stimulate economic growth
- Cyclical unemployment is not part of the NRU

Inflation

Inflation – a general & sustained **increase in the average price level** of ALL products in the economy, causes money to hold less value & **decreases the purchasing power of the dollar**

Inflation rate is the % change in the price level from the previous period or base year

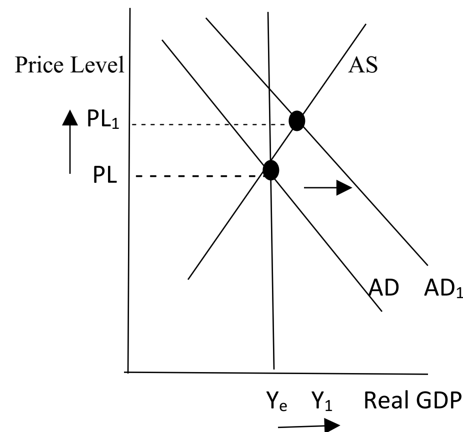
- Natural rate of inflation is 3% or less

Consumer Price Index (CPI) – an index used to **measure inflation**; measures the overall cost of goods and services commonly purchased by consumers

CPI = Current-year cost / base-year cost x 100

Causes of Inflation

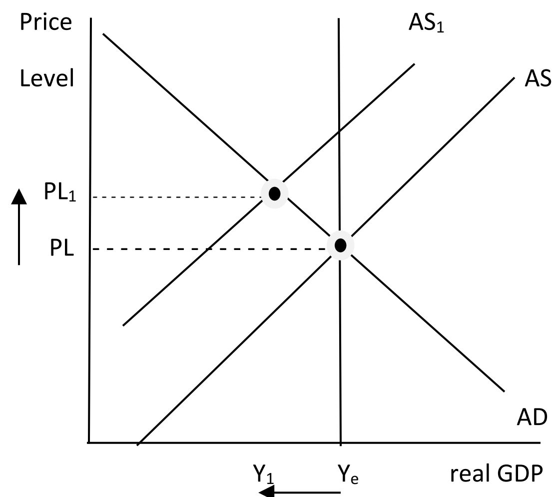
1. **DEMAND-PULL** – when aggregate demand for goods & services exceeds existing supplies
   - Aggregate Demand (AD) for goods increases faster than Aggregate Supply (AS), so there is a **shortage of goods & services that cause prices to increase**
   - **"Too many dollars chasing too few goods"** due to excess monetary growth caused by the **Federal Reserve's** "easy money" policy of **low interest rates**



The graph above shows **Demand-pull inflation**. AD has increased & shifted right and pulled the price levels upward.

2. **COST-PUSH Theory** – **when producers raise prices in order to meet increasing costs of inputs (**cost of energy, labor, gov't taxation & regulation, negative supply shocks)

- Cost-push inflation causes the AS curve to shift left, increasing prices & decreasing output = **STAGFLATION!!!**



STAGFLATION is a decline in real GDP with a rise in price levels; in other words, it's a **combination of a stagnant economy with high inflation**

Destabilizing Effects of Inflation

1. Dollar buys less, meaning the dollar loses value over time, thus **decreasing one's purchasing power**
2. Extremely hard on retired workers **living on fixed incomes** like social security
3. People change spending habits by saving more than spending, which disrupts the economic business cycles (C and I are affected)
4. **Inflation in the long run favors the debtors over the creditors because the value of the dollar decreases every year**

Money – Currency regularly accepted in exchange for goods and services

3 Functions of money:

1) **Medium of Exchange** – exchange/payment for products; buyers give sellers in exchange for goods/services
2) **Unit of Account** – an expression of value; a way for comparing the values of goods and services
3) **Store of Value** – money holds its value if you decide to store it instead of spend it

Types of Money

1. Commodity money – money that has an alternative use as a commodity, which has intrinsic value (item has value if not used as money)
   - Gold, cigarettes (WWII), tulip bulbs (1600's Europe), etc.
2. Representative Money – money that is backed by something else valuable
   - Gold Standard
3. **Fiat money** – "order/decree"; government issued money
   - Legal tender that a gov't has required to be accepted in settlement of debts; intrinsically worthless paper dollars
   - **U.S. uses fiat money because we're no longer on the gold standard**

Liquidity – ease with which an asset (liquid asset) can be converted into money/medium of exchange (Ex: Liquid – checking account; non-liquid – your House)

M0 – cash and coins
M1 – money that people can gain access to easily and immediately; currency, checkable demand deposits (balances in bank accounts) & travelers checks

- High liquidity – currency, checking accounts (demand deposits) & traveler's checks

M2 – consists of all the assets in M1 plus savings account & CDs (less liquid)

Monetary Policy and the FED

Monetary policy ("money") – directly affects the **nation's money supply** (expansionary or contractionary) to influence the **cost & availability of credit** (low or high interest rates)

Federal Reserve ("The **FED**") – U.S. **central bank**

- Central Bank – institution designed to **oversee the banking system** and **regulate the quantity of money** in the economy

Structures of the FED

- Central Bank is in Washington, D.C.
- Run by a 7 member **Board of Governors**
- Appointed by POTUS, confirmed by the Senate to 14 year terms
- Board is led by the **Chair of the Fed**
- Current chair of the Fed is **Janet Yellen**
- Fed is comprised of 12 Federal District Reserve Banks that monitors economic and banking conditions in its district

The Federal Open Market Committee (FOMC)

- FOMC holds 8 regularly scheduled meetings a year & monitors the money supply
- 7 **member Board of Governors** plus the **President of the FED of NY** make up the permanent members, and **4 of the other 11 regional bank presidents rotate on a yearly basis**
- All 12 attend, **only 5 vote, President of New York Fed always votes** (financial capital of the world)
- FOMC vote to either **increase (expansionary) or decrease (contractionary)** the money supply

FED's 3 Tools of Monetary Control

1) **Open-Market Operations** – **purchase & sale of U.S. government bonds by the Fed**

- **Most often used method** to control the money supply because it has an immediate effect
- To increase the money supply, **Fed buys bonds from the banks & credits the banks with money ("BUY BIG")**
- **Easy-Money Policy** – expansionary monetary policy, goal is to expand the economy by **lowering interest rates**, **increase inflation**, **encourages banks to lend money to consumers, discourage saving**, **increases the money supply**
- **Policy is used stimulate the economy by promoting business investments & consumer spending**
- To decrease the money supply, **Fed sells bonds to the banks & withdrawals money from the banks ("SELL SMALL")**

- **Tight-Money Policy** – contractionary monetary policy, goal is to **slow the economy** by **raising interest rates**, **cause inflation to slow**, **discourage borrowing**, **encourage saving**, **restricts the money supply**
- **Policy slows down business activity & investments & stabilizes prices, which reduces aggregate demand**

2) **Reserve Ratio** – **regulations on the minimum amount of reserves that banks must hold against deposits**

- Fractional-reserve system – banks hold only a fraction of deposit reserves as opposed to a 100% reserve system (how banks "create" money)
- Currently 10% requirement on M1 money
- Influences how much money banks can create from each deposit (reserves)
  - Increase in RR, banks must hold more reserves, can loan out less (contractionary)
  - Decrease in RR, banks must hold less reserves, can loan out more (expansionary)

3) **Discount Rate** – **interest rate on loans the FED charges its MEMBER BANKS**

- Fed is the lender of last resort
- Banks borrow from Fed when it has low reserves; too many loans, high withdrawals
  - Higher discount rate discourages borrowing (contractionary)
  - Lower discount rate encourages borrowing (expansionary)

Fed's Monetary Policies	Recession (Expansionary)	Inflationary Gap (Contractionary)
Open Market Operations	Buy Bonds	Sell Bonds
Reserve Ratio	Decrease RR	Increase RR
Discount Rate	Decrease DR	Increase DR

Fiscal Policy and the Government

Fiscal Policy – **federal government's use of taxes & gov't spending** to affect the economy

- Either speed up (gas) or slow down (brake) the economy
- 2 GOALS: (1) **increase aggregate demand** (2) **fight inflation**
- When economy is in **recessionary period**, gov't may use **expansionary fiscal policy** to **increase aggregate demand** & stimulate a weak economy
  - Gas = increase gov't spending and/or decrease taxes
- When economy experiences an **inflationary period**, gov't may use a **contractionary fiscal policy** to **reduce aggregate demand** & slow the economy in a period of too-rapid expansion
  - Brake = decrease gov't spending and/or increase taxes

Gov't's Fiscal Policy	Recession (Expansionary)	Inflationary Gap (Contractionary)
Gov't Spending	Increase	Decrease
Taxes	Decrease	Increase

Discretionary fiscal policy involves actions taken by the gov't to correct economic instability; Congress must pass a law or the government takes an action that affects the economy due to a recession

- Ex: 2008 Stimulus Bill under Obama

Non-discretionary spending (**Automatic Stabilizers**) are required by current law, such as unemployment benefits, Welfare, food stamps, and social security (entitlements) and account for over ½ of all gov't spending

Gov't earns its revenue through either (1) taxes or (2) borrowing from other countries with interest

Impact of Taxes on the Economy

- Taxes slow down the economy by discouraging business growth because its more expensive to do business and limits consumer spending because individuals have less disposable income (DI) to spend!
  - If government increases taxes on businesses, it raises the cost of production which shifts the aggregate supply (AS) curve LEFT and causes the Price Level (inflation) to increase (vice versa)
  - If government increase taxes on households, consumption decreases and aggregate demand decrease and the AD curve shifts LEFT, decreasing the Price Level (deflation) and vice versa

John Maynard Keynes

- **Great Depression of 1930s** changed the role of gov't in the economy (discretionary fiscal policy)
- **Keynesian economics** believes that in times of RECESSION aggregate demand needs to be stimulated by gov't action & forms the basis of **demand-side fiscal policy** (expansionary fiscal policy)
- Keynes "revolutionary" idea of expansionary fiscal policy to attain full employment & an active role of gov't in the economy challenged Classical economists who supported **limited gov't** and the **laws of supply & demand** to drive the economy
- **Negatives: (1) National Debt** due to gov't **deficit spending, (2) Crowding-out Effect** occurs when gov't borrows money raising interest rates and pushing the business sector out of the economy**, (3) Inflation** occurs due to increased AD from gov't and consumer spending

Unit 5 International Trade

Scarcity, Resource Distribution, & Specialization

- Because each nation has certain productive resources & cannot produce everything it wants, individuals, businesses, & nations must decide what goods & services to focus on
- **Specialization** – a situation that occurs when individuals or businesses produce a narrow range of products to **maximize resources,** increase **productivity,** & make a **profit**
- **Economic interdependence** – a situation in which producers in one nation depend on others to provide goods & services they don't produce (opposite of **isolationism)**

Absolute v. Comparative Advantage

Absolute Advantage – a nation can produce more of a given product using a given amount of resources

Comparative Advantage – a nation's ability to **specialize** & produce a product most efficiently given all the other products that could be produced **(lower OPPORTUNITY COST)**

Law of comparative advantage – a nation or person is better off when it produces goods and services for which it has a comparative advantage

Trade Barriers – trade restrictions to prevent a foreign product from freely entering a nation's territory

- **Protective Tariffs** – a tax on imported goods to protect domestic and **infant industries**
- **Import Quotas** – a limit on the amount of a good that can be imported
- **Voluntary Export Restraint** – a self-imposed limitation on the number of products shipped to a particular country
- Embargo – a law that cuts off most or all trade with a specific country
  - America has/had an embargo on Cuba, North Korea, Iran (political reasons)

Protectionists support trade barriers to protect domestic industries & jobs, promote **infant industries**, & protect national security **(Protectionism is anti-free trade)**

International Free Trade Agreement – results from cooperation between countries to reduce trade barriers and tariffs to promote trade

Trading Blocs/Agreements

1) North American Free Trade Agreement **(NAFTA)** – agreement between **Canada**, **Mexico** and the **U.S.** to eliminate tariffs and other trade barriers
2) European Union **(EU)** – a regional trade organization of European nations
3) Association of Southeast Asian Nations **(ASEAN)**
4) World Trade Organization **(WTO)** – a worldwide organization whose goal is to promote free global trade & supervises international trade

Measuring Trade

- Foreign Exchange Market – market where **currencies of different countries are bought & sold**
- Foreign Exchange Rate – the value of one foreign nation's currency in relation to another nation's currency
- Flexible Rate of Exchange – system in which the exchange rates for currencies change as the supply & demand for the currencies change (floating rate)
- Fixed Rate of Exchange – system in which currency of one nation is fixed, or constant, in relation to other currencies (gold; US $)

Strong v. Weak Dollar & Trade (Exports/Imports)

- **Strong dollar ⟶ imports ⟶ trade deficit**
- **Weak dollar ⟶ exports ⟶ trade surplus**

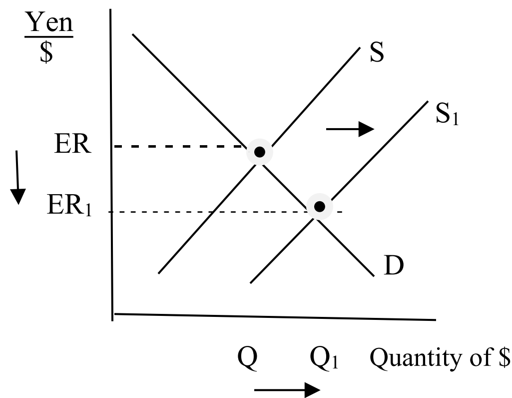
When countries trade with other countries, they aren't buying goods and services, but buying currency (money) in the foreign exchange market first. Whichever nation has the strong currency (appreciated) will be the buyer (importer) and the nation with the weak currency (depreciated) will be the seller (exporter)

- Balance of Trade – the difference between the value of a country's imports & exports
  - **Favorable Balance of Trade:** nation has a trade surplus (exports more than it imports)
  - **Unfavorable Balance of Trade:** nation has a trade deficit (imports more than it exports)

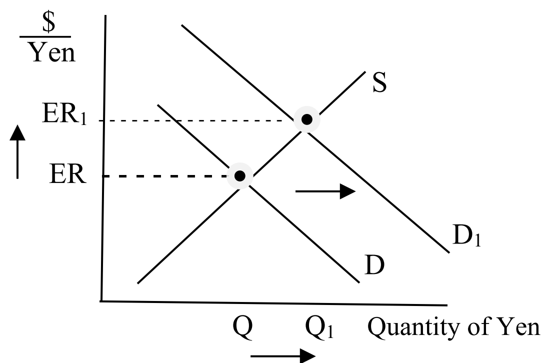
Balance of Payments – a record of all the transactions that occurred between the individuals, businesses, & gov't units of one nation & those of the rest of the world (how balance of trade is tallied)

FOREX Graphs

EX1: Japanese currency (Yen) is weaker compared to the stronger U.S. dollar ($) in the Foreign Exchange Market (**FOREX**). Therefore, America will import more cheaper Japanese goods and Japan will export their cheaper products.



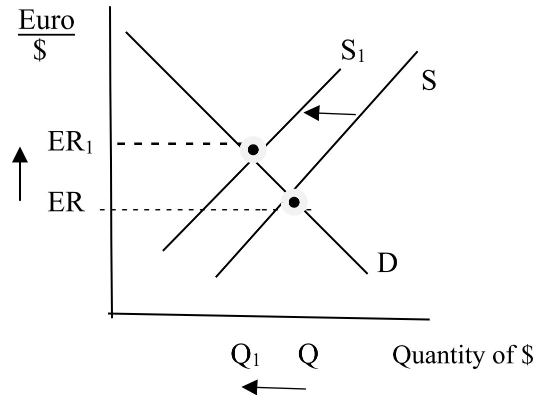
U.S will Supply more dollars to Japan to buy cheaper Japanese products. This will eventually **Depreciate** the value of the American $ as shown by the graph above.



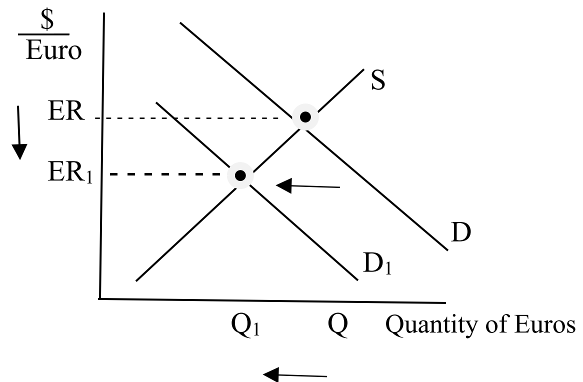
Japan will export more of their cheaper goods, causing an increase of demand for Yen and the Japanese currency will then **Appreciate** in value.

Over time the trading relationship between the U.S. and Japan will flip-flop as the U.S. dollar **depreciates** (becomes weaker) due to an increase in Supply, while the Japanese Yen **appreciates** (becomes stronger) due to an increase in Demand. This is what is meant by a **Flexible Rate of Exchange** in International Trade

EX2: The Euro is stronger than the U.S. dollar in the FOREX. Therefore, America will export more goods and services to Europe. What will eventually happen to the foreign exchange rate of the $ and Euro?



U.S. will supply less dollars to Europe, importing fewer goods, because the Euro is stronger. The value of the dollar will eventually **Appreciate** because the supply will decrease.



U.S. will demand less Euros, and over time, the value of the Euro will **Depreciate**.