

Monopoly Monday! May 15, 2017

- EOCT is TOMORROW—get a good night's sleep tonight!!!
 - 2nd Period: 8:30 a.m. in 2110 lab (new building)
 - 5th Period: **8:30** in lab 303
 - 6th Period: 12:50 in 2110 lab (new building)
 - **EXTENDED TIME: SHOW UP IN MEDIA CENTER AT 8:30**
- One assignment and one practice test are on USA Test Prep!!
- Remaining tutoring session:
 - No tutoring after school today!!
 - Tuesday (tomorrow) before school here

Economics Georgia Milestone
Review

Scarcity

- Basic Economic Problem
 - Too many wants and needs, limited resources.

Basic Economic Questions

- What to Produce?
- How to Produce?
- For Whom to Produce?

Four Factors of Production

- Land
- Labor
- Capital
- Entrepreneurship

Allocate

- How you are going to use your resources?
- For example = you have \$100 dollars.
How are you going to divide this resource

Rational Decision Making

- Cost and Benefit Analysis
- You always the benefit to exceed the cost.

Voluntary Non-Fraudulent Exchange

- You agree to purchase an item at a store and the store exchanges you an item for payment.
- Fraudulent = When you try to trick or mislead consumers.

- **Micro-Economics =**
Concerns individuals, businesses, and households

- **Macro-Economics =**
Concerns issues dealing with entire economies

Trade-Off and Opportunity Cost

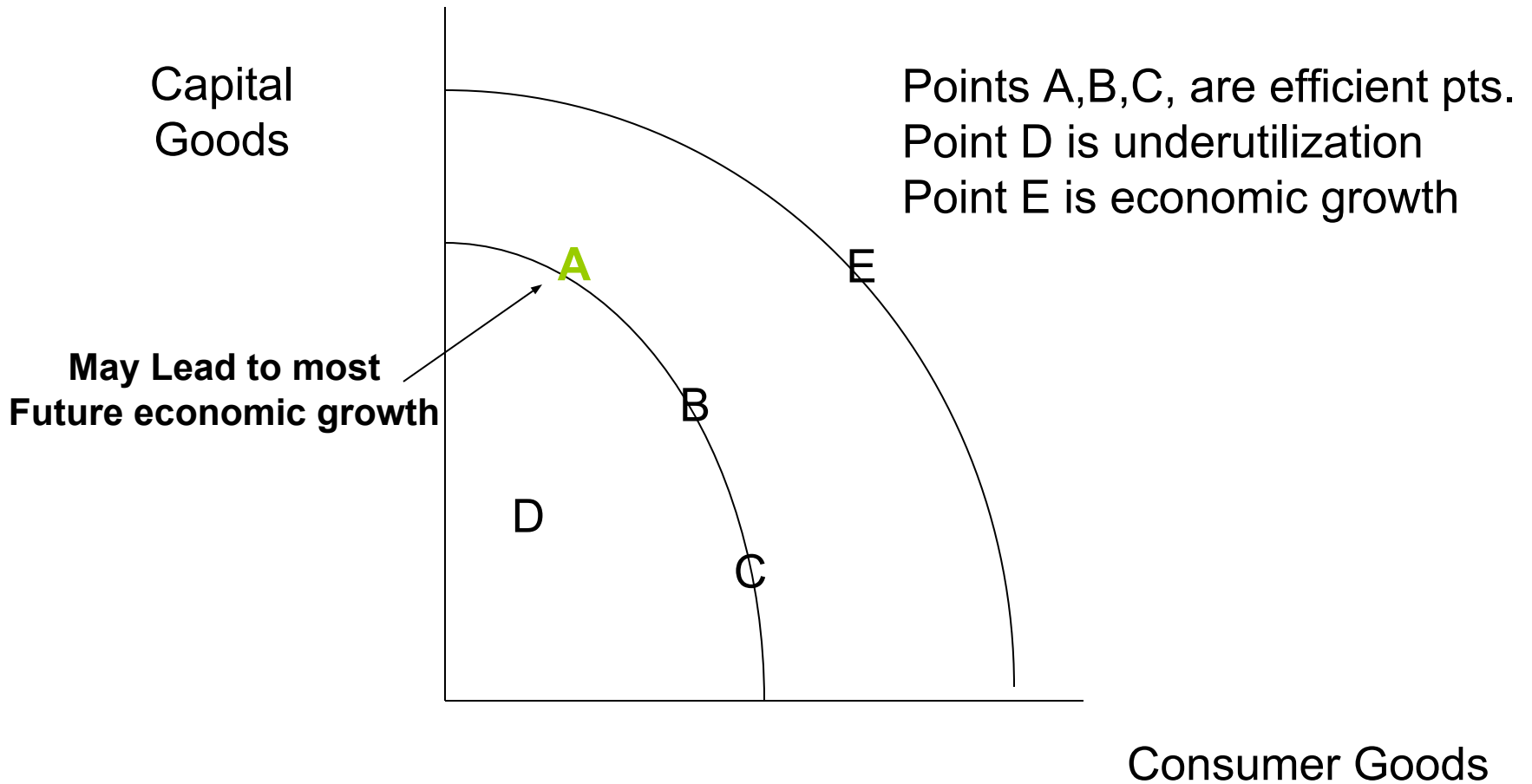
- Trade-Off = Making one decision over another

Opportunity Cost = The next best alternative when making a choice.

Production Possibilities

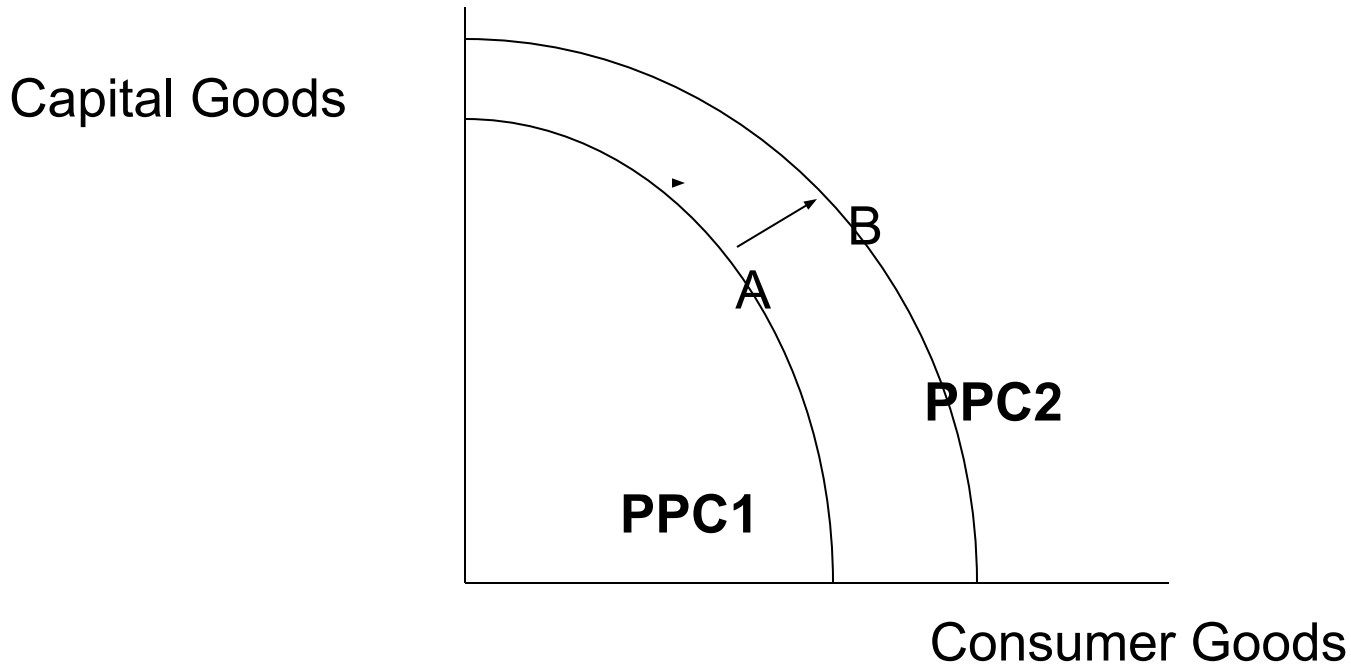
- Assumptions:
 - Full Employment
 - Fixed Resources and Technology
- Movements
 - Along curve shows opportunity cost
 - Outward shift illustrates economic growth
 - Inward shift indicates destruction of resources
- Producing Capital Goods will lead to greater economic growth than producing consumer goods. (*Butter* will lead to more growth than guns)

Production Possibilities Graph

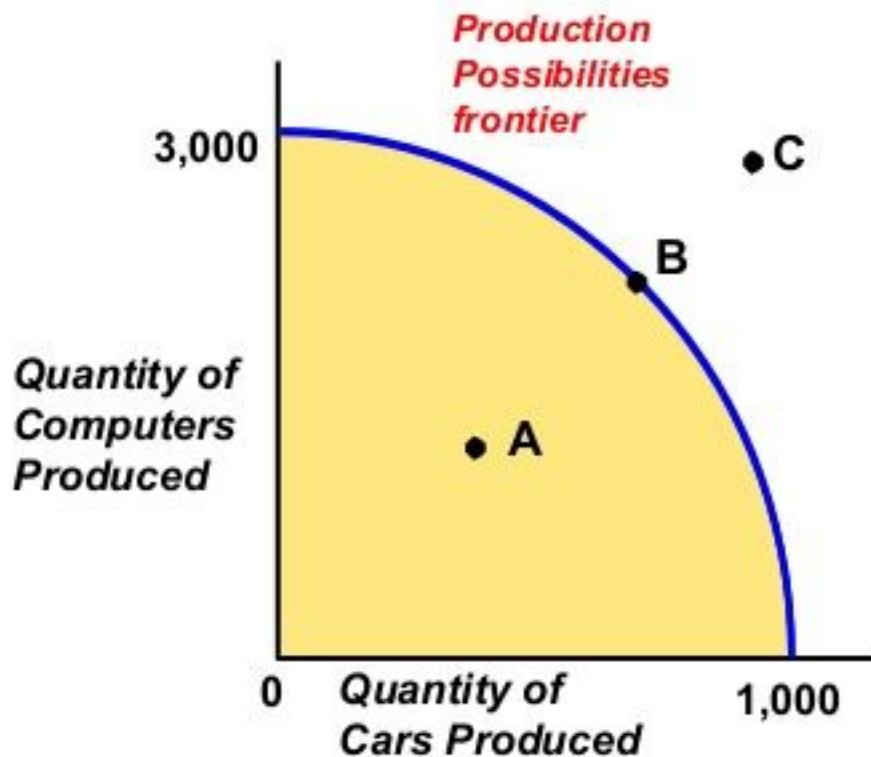


Illustrating Economic Growth

- Production Possibilities Curve



Attainable and Unattainable



- All points on or inside the frontier are attainable
- Point A is attainable, so is point B. In fact B is better!
- Point C is unattainable

Economic Systems

- Capitalism=Free Market
 - Most decisions made by Private businesses and individuals.

Communism=Command Economy

- Most decisions made by the government

- Mixed Economy=Features of both Capitalism and Communism
 - Decisions made by both the market and governments

Other names for free market system

- Free enterprise
- Market system
- Capitalism

Characteristics of free market:

- Competition
- Private Property
- Specialization
- Voluntary Exchange
- Laissez-Faire (no gov. interference)

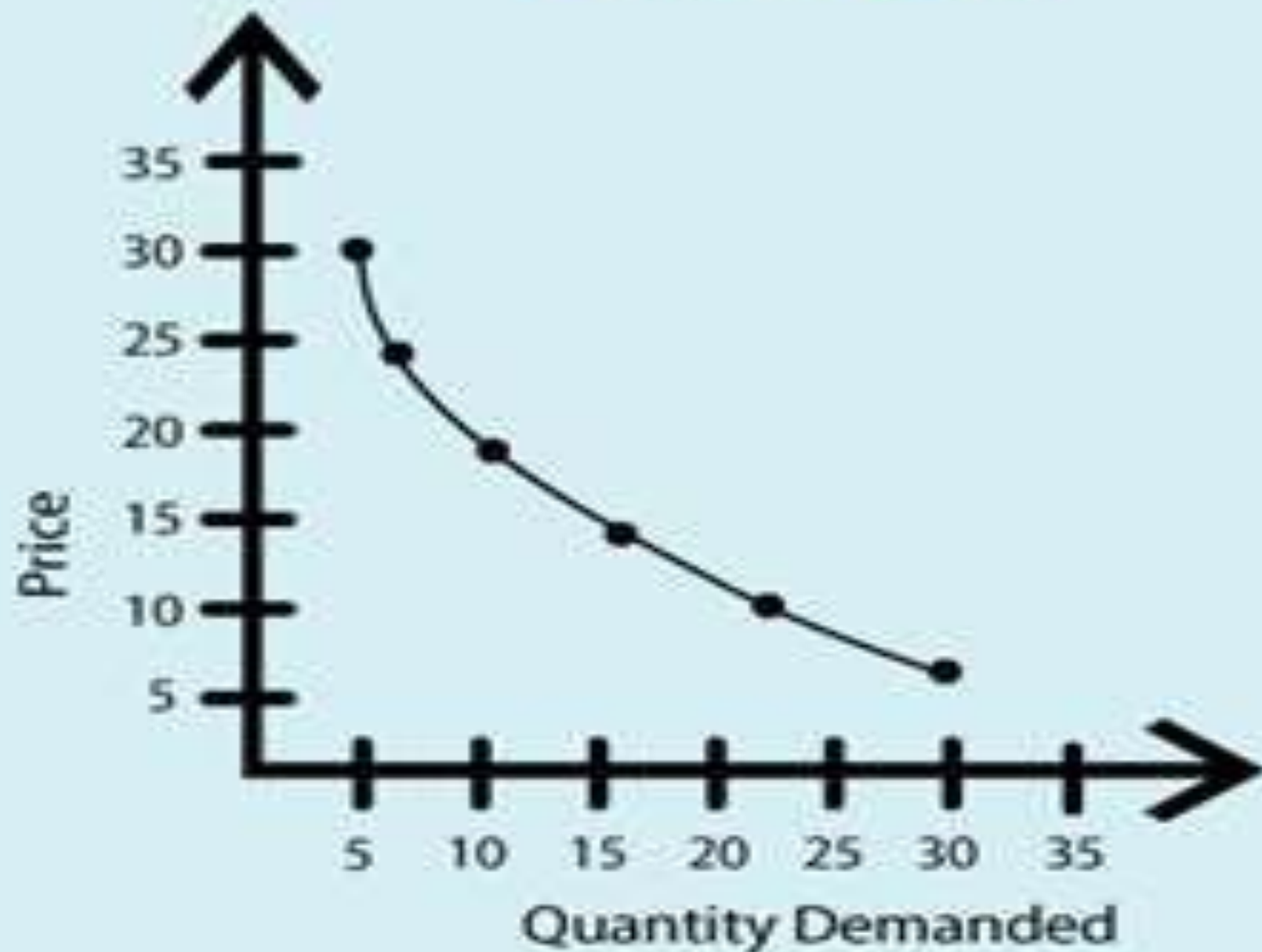
Specialization

- In a market system, people and businesses specialize in order to make profit and be successful.
- Examples of specialization =
Division of Labor
Assembly Line Worker

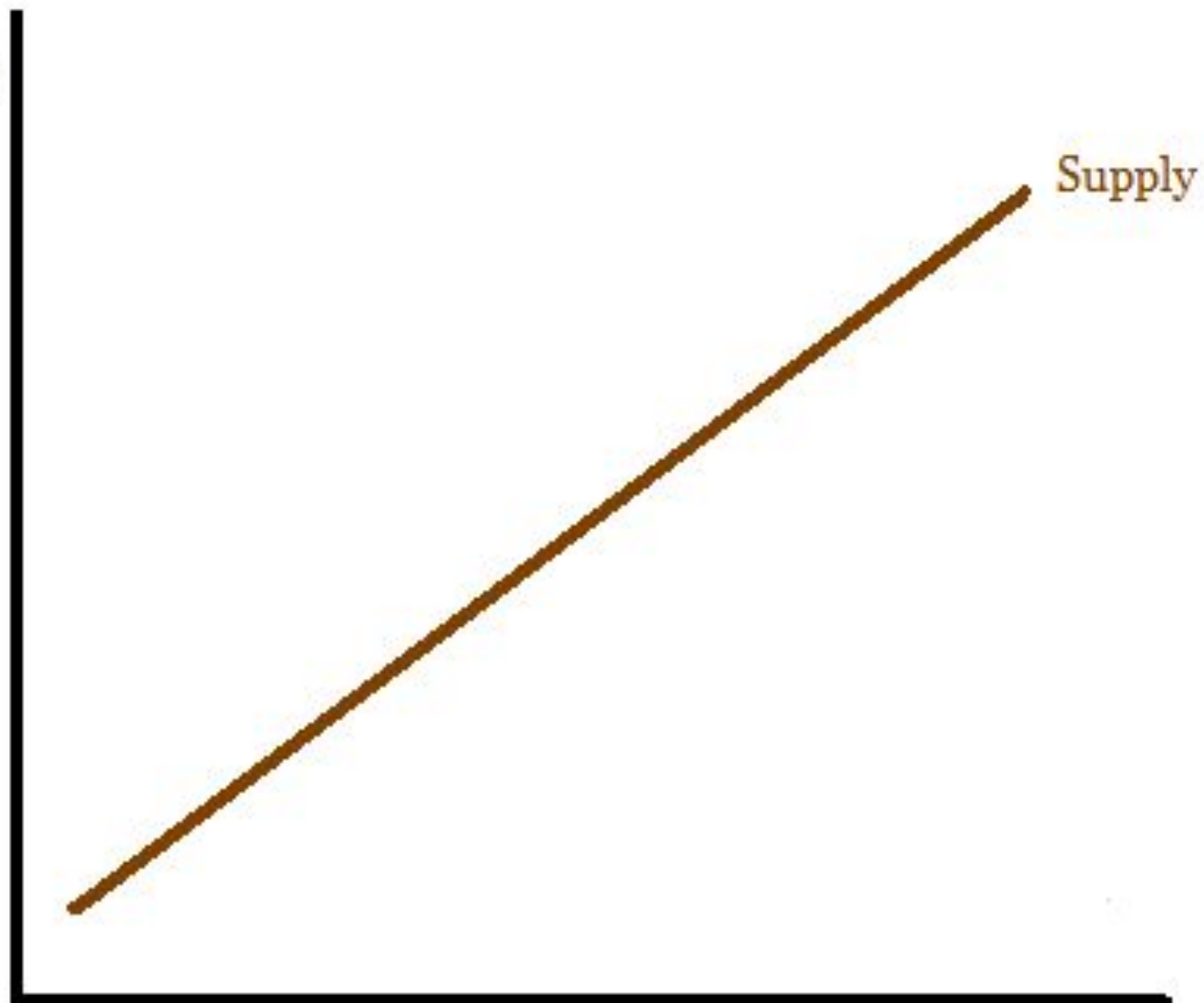
Supply and Demand

- Law of Demand = As prices go up, demand goes down
- Law of Supply = As prices go up, supply goes up.

Demand Curve

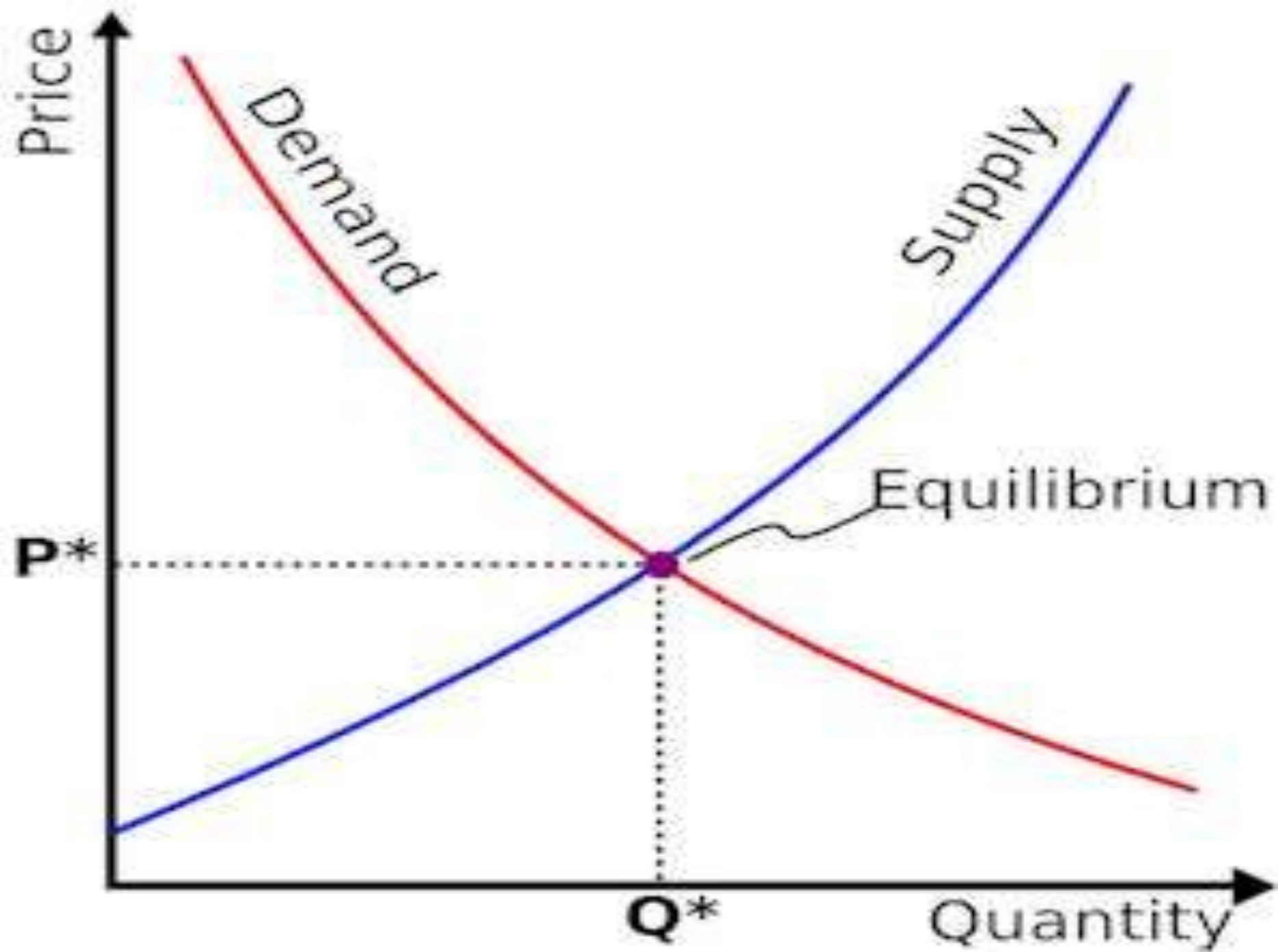


Price of Potato
Chips
(\$/bag)



Supply

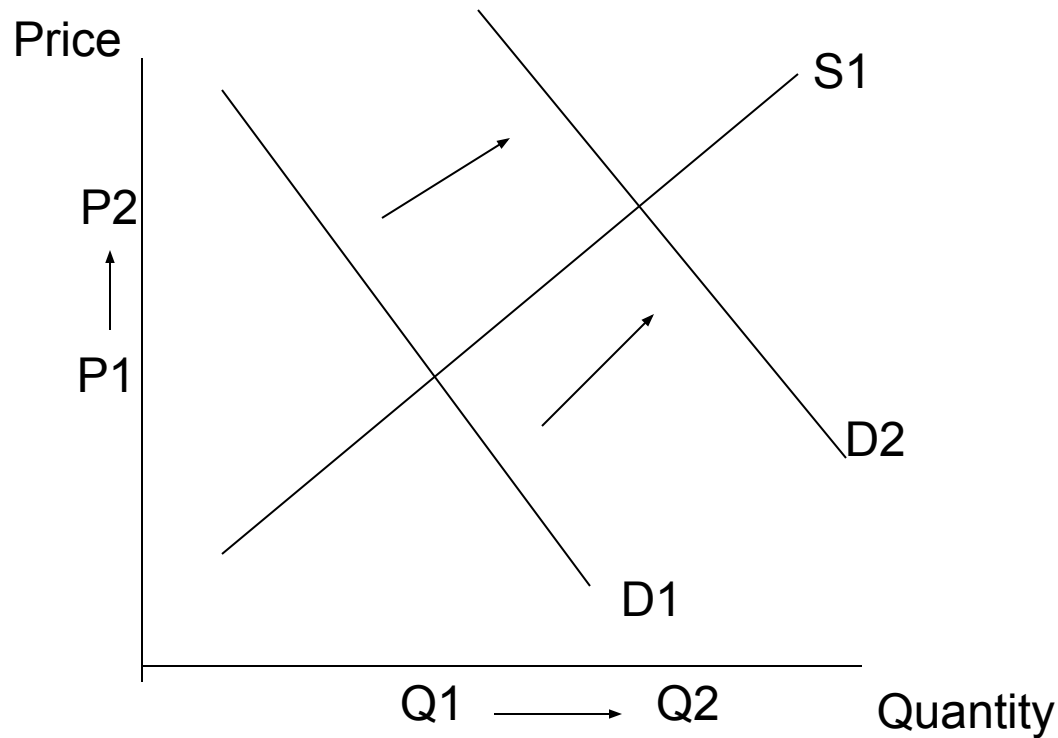
Quantity of
Potato Chips
(bags)



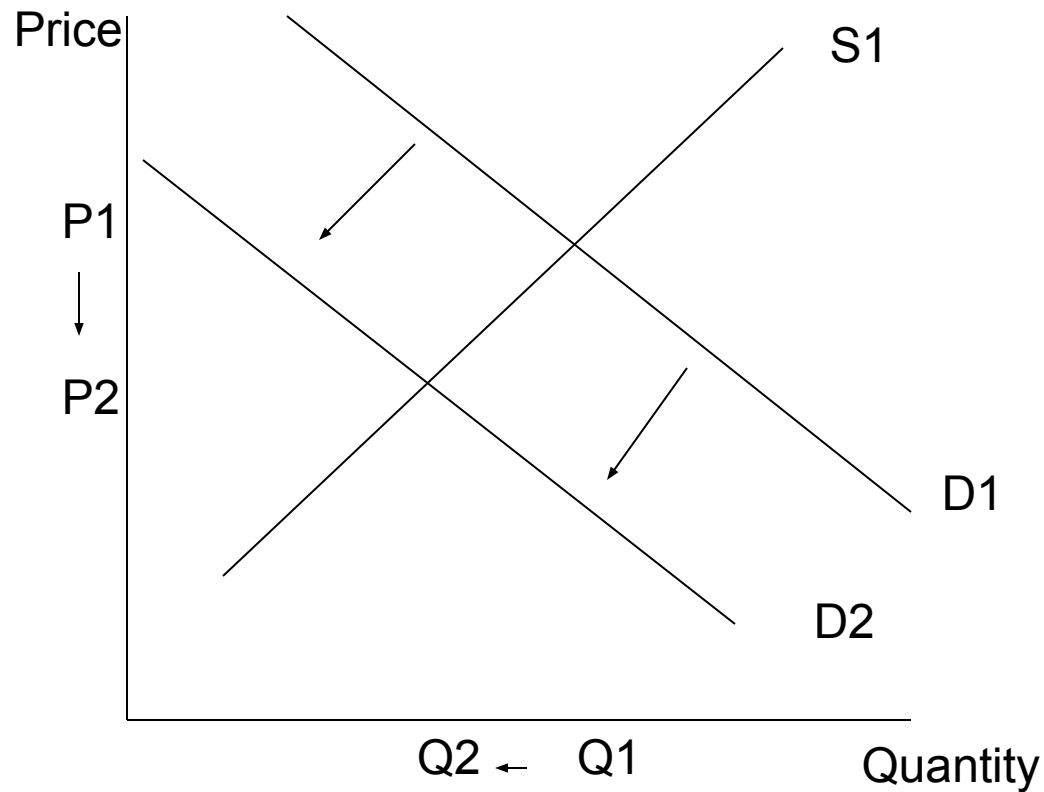
Supply and Demand Factors

- **Demand Changes when:**
 - Income changes
 - Number of Consumers
 - Substitute Goods
 - **Expectations** (future price change)
 - Complimentary Goods
 - Tastes (Consumer Tastes and Preferences)

Demand Increase: As Demand Increases,
Price and Quantity Increase as well.



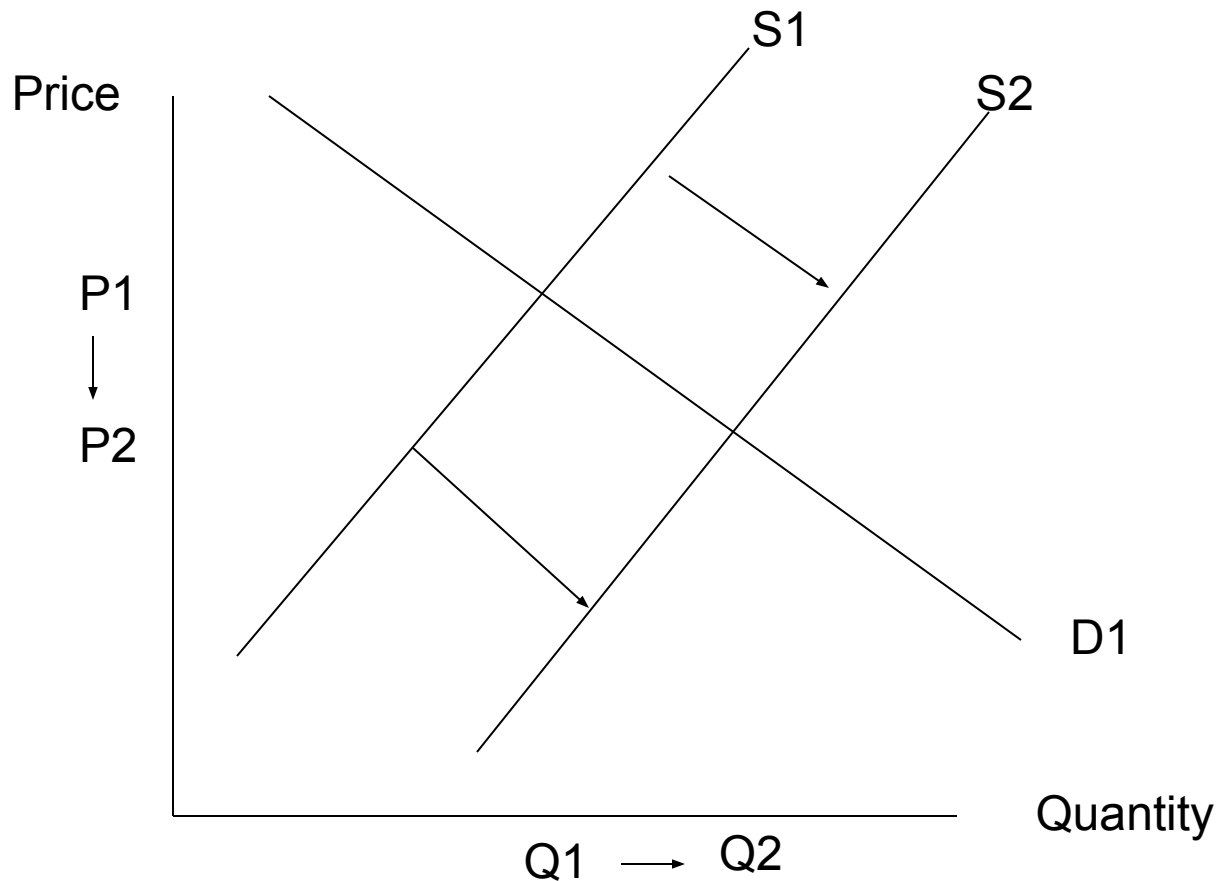
Demand Decrease: As Demand Decreases, Price and Quantity decrease as well



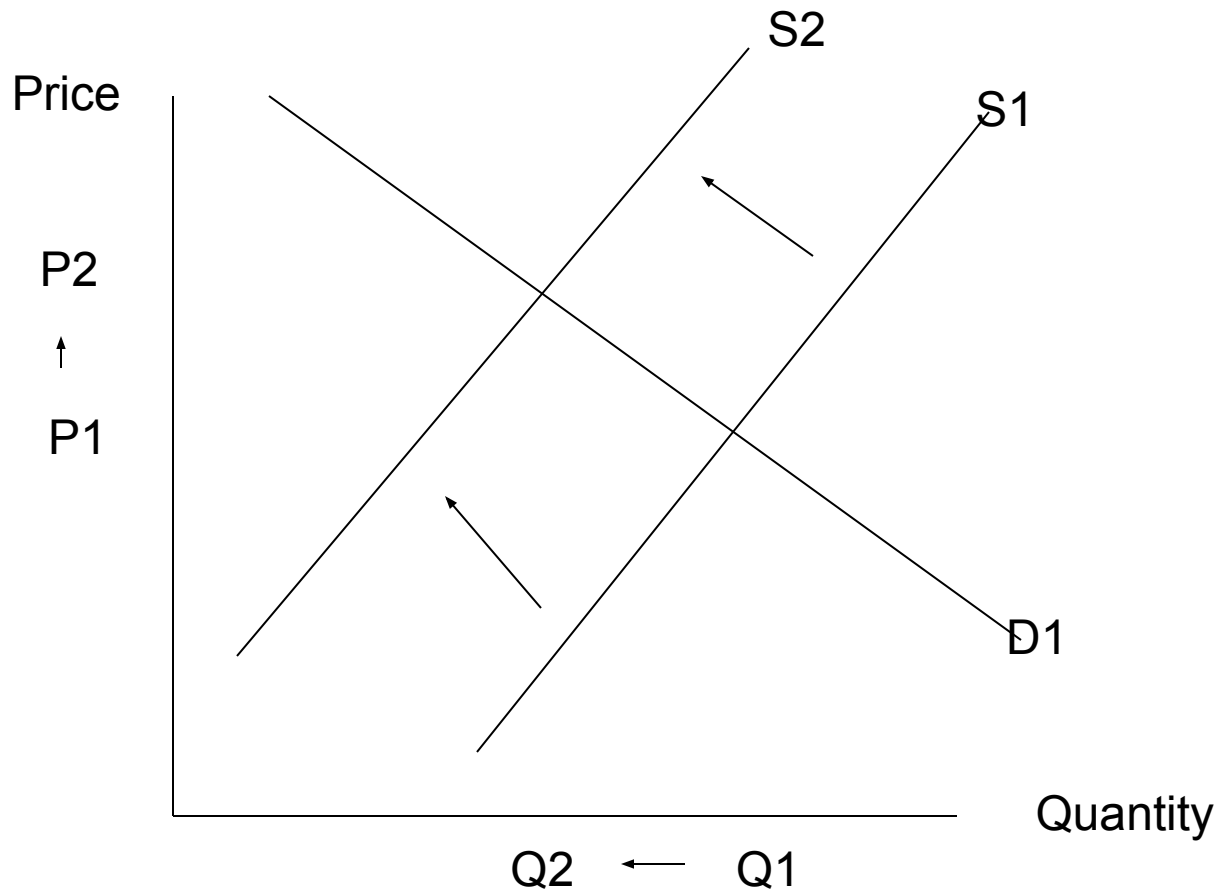
Supply Factors

- E Expectations (about price and product profitability change)
- A Availability of resources
- T Taxes
- I Input Costs
- N Number of Producers
- G Government Action (tariff, quota, subsidies)

Supply Increase: As Supply Increases, Quantity Increases, but Price Falls.

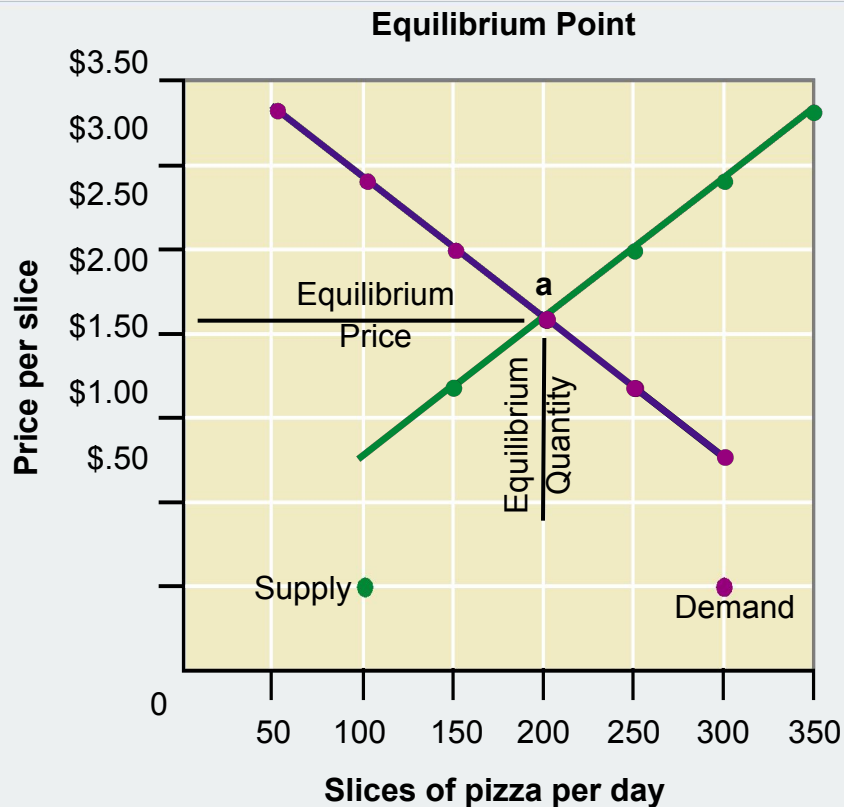


Supply Decrease: As Supply Decreases, Quantity Decreases, but Price Increases.



The point at which quantity demanded and quantity supplied come together is known as **equilibrium**.

Finding Equilibrium



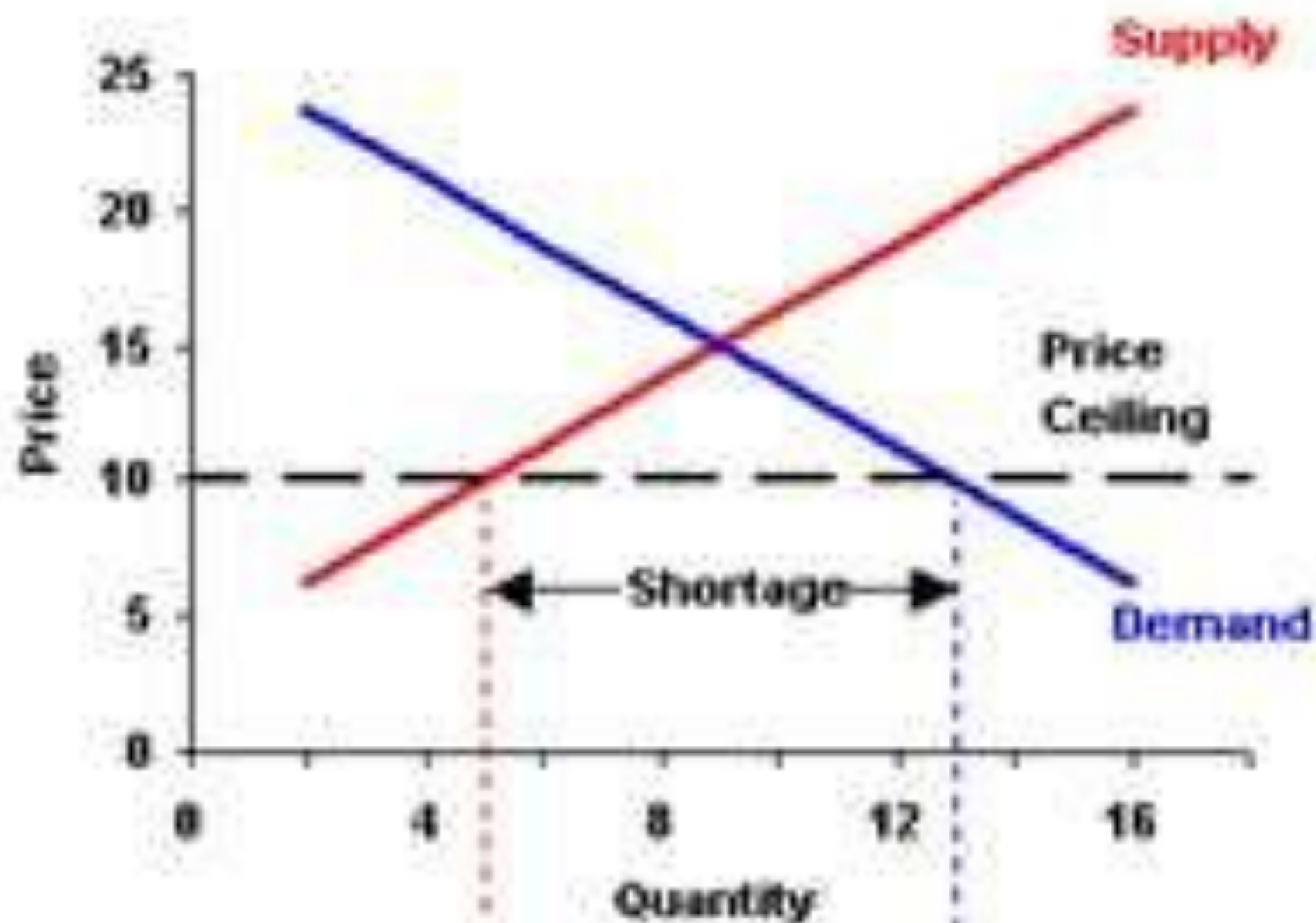
Combined Supply and Demand Schedule

Price of a slice of pizza	Quantity demanded	Quantity supplied	Result
\$1.00	250	150	Shortage from excess demand
\$1.50	200	200	
\$2.00	150	250	Surplus from excess supply
\$2.50	100	300	
\$3.00	50	350	

Price Ceilings

In some cases the government steps in to control prices. These interventions appear as price ceilings and price floors.

- A **price ceiling** is a maximum price that can be legally charged for a good.
- An example of a price ceiling is rent control, a situation where a government sets a maximum amount that can be charged for rent in an area.

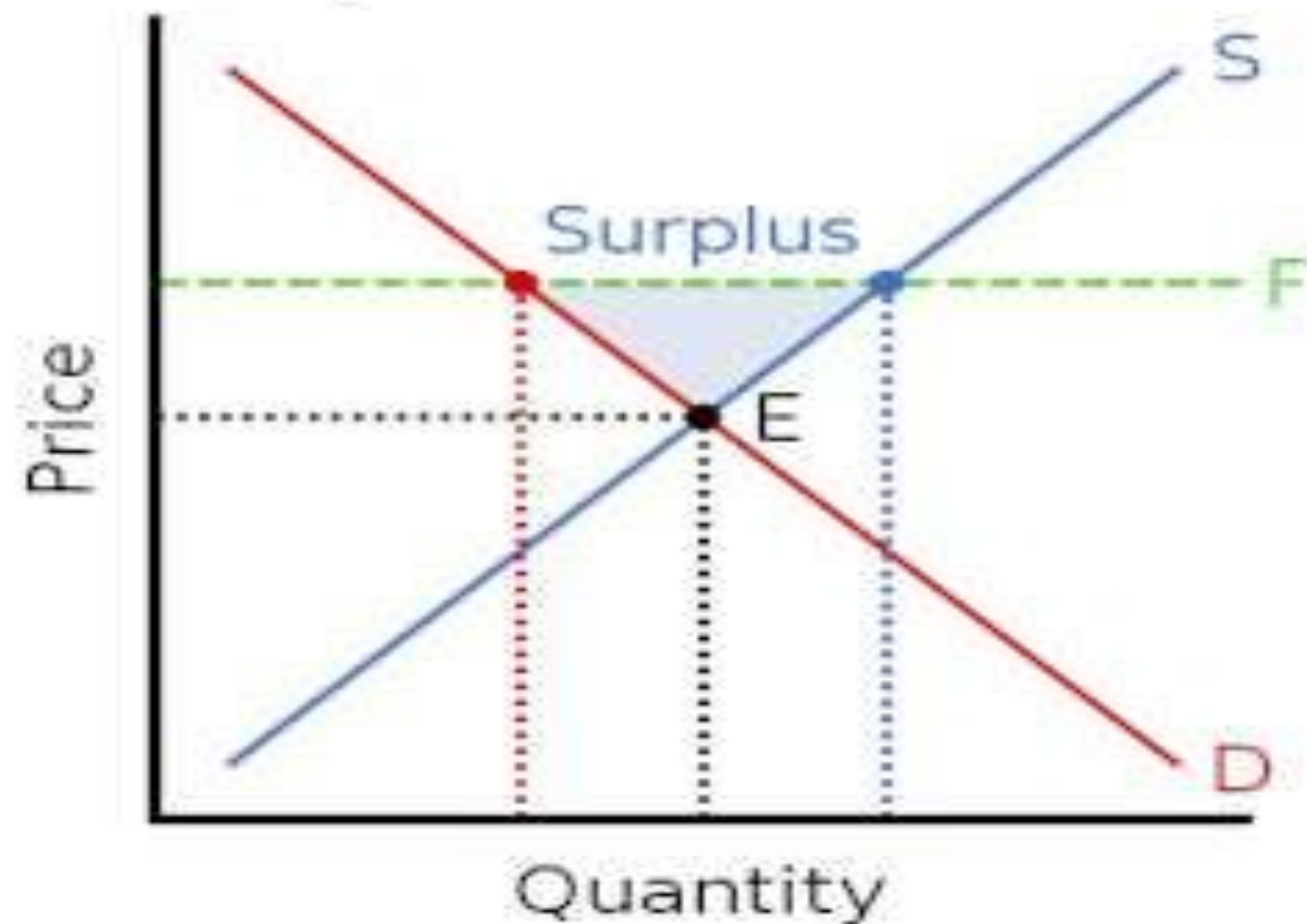


Quantity Supplied < **Quantity Demanded**

Price Floors

- A **price floor** is a minimum price, set by the government, that must be paid for a good or service.
- One well-known price floor is the **minimum wage**, which sets a minimum price that an employer can pay a worker for an hour of labor.

Surplus from Price Floor

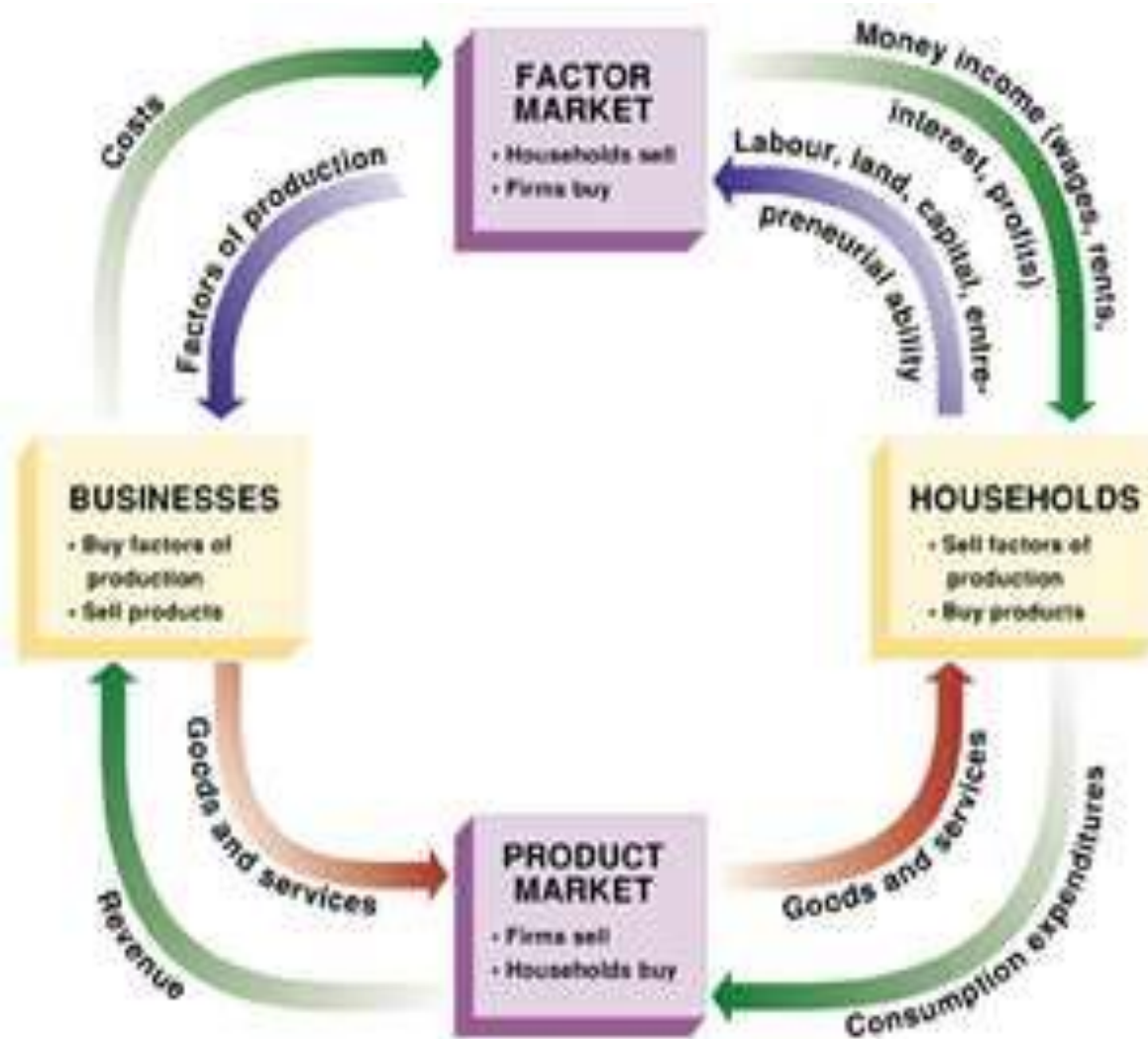


Circular Flow of Economic Activity

- Households ***supply resources*** (land, labor, capital, entrepreneurial ability) to the ***factors market***. Households ***demand*** goods and services from businesses.
- Businesses ***demand*** household resources and ***supply goods and services*** to the ***product (factor)*** market.

Four Parts of Circular Flow Model

- Factors Market
- Products Market
- Households
- Businesses



Business Organizations

- Sole Proprietorship = Individuals owned
- Partnership = Two or more people own
- Corporation = Stock or Share Holders own

Sole Proprietorship

- Advantages of Sole Proprietorship
 - Full control
 - Sole profits go to you

- Disadvantages of Sole Proprietorship
 - Unlimited Liability = you are responsible for everything concerning the business.
 - Limited Life = When owner quits, business end.

Partnership

- Advantages of Partnership:
 - Shared Responsibility
 - Specialization
 - Pooling Capital

Disadvantages of Partnership:

- Potential for Conflict
- Less capital than Corporation

Corporation

Advantages of Corporation:

- More capital
- Limited liability

Disadvantages of Corporation:

- Double Taxation
- More regulations

Market Structures

- Perfect Competition
- Monopolistic Competition
- Oligopoly
- Monopoly

Oligopoly

Oligopoly describes a market dominated by a few large, profitable firms.

Collusion

- **Collusion** is an agreement among members of an oligopoly to set prices and production levels. **Price-fixing** is an agreement among firms to sell at the same or similar prices.

Cartels

- A **cartel** is an association by producers established to coordinate prices and production.

Comparison of Market Structures

Comparison of Market Structures				
	Perfect Competition	Monopolistic Competition	Oligopoly	Monopoly
Number of firms	Many	Many	Two to four dominate	One
Variety of goods	None	Some	Some	None
Control over prices	None	Little	Some	Complete
Barriers to entry and exit	None	Low	High	Complete
Examples	Wheat, shares of stock	Jeans, books	Cars, movie studios	Public water



GDP Measures Economic Growth

GDP (Gross Domestic Product): The total dollar (market) value of all *final* goods and services *produced* in a given year.

Expenditure Formula: $C+I+G+(x-m)$

- Consumption (C) +
- Business Investment (I) +
- Government Spending (G) +
- Net Exports (x-m) exports-imports

GDP: What Counts:

- Goods Produced but not Sold (I)
- Goods produced by a foreign country (Japan) in the U.S. (Honda, Toyota)
- Government spending on the military
- Increase in business inventories

GDP: What DOES NOT count:

- Intermediate Goods (Tires sold by Firestone to Ford)
- Used Goods
- Non-Market Activities (Illegal, Underground)
- Transfer Payments (Social Security)
- Stock Transactions

Shortcomings of GDP: Leading to GDP being *understated*.

- **Nonmarket activities:** (services of homemakers) does not count.
- **Leisure:** Does not include the value of leisure.
- Does not include improvements in **product quality**.
- **Underground economy**

GDP: Overstated

- Includes **damage to the environment**
- Includes more spending on healthcare-Americans being **unhealthy**.
- Includes money spent to fight crime-more police officers, more jails, etc...

Real GDP

- Real GDP= Nominal GDP adjusted for inflation.
- Calculation:
 - Real GDP =
$$\frac{\text{Nominal GDP}}{\text{Price Index in Hundredths(deflator)}}$$

Example:

U.S. 2005 Real GDP=
$$\frac{\$12,4558 \text{ (billions)}}{1.1274 \text{ (based on 2000)}}$$

\$11.048 Trillion

Real GDP Per Capita

- **Most commonly used to compare and measure each country's standard of living and overall economic growth.**
- Real GDP/Nation's Population

Est. 2010 Per Capita GDP (PPP)

Source: CIA World Factbook.

U.S.	\$	47,400
Canada	\$	39,600
United Kingdom	\$	35,100
Poland	\$	18,800
Mexico	\$	13,800
Bulgaria	\$	12,800
Serbia	\$	11,000
Phillippines	\$	3,500
India	\$	3,400
Pakistan	\$	2,400

Business Cycles

- The increases and decreases in Real GDP consisting of four phases:
 - Peak: highest point of Real GDP
 - Contraction = period of declining Real GDP
 - Recession: Real GDP declining for 6 months
 - Depression: Long and Severe Recession
 - Trough: lowest point of Real GDP
 - Expansion (Recovery): Real GDP increasing (trough to peak)



Business Cycle and Stock Market Cycle

Level of Output (GDP) or Stock Market Index



Unemployment

- Calculation: $\frac{\text{Number of Unemployed}}{\text{Labor Force}}$

(Multiplied by 100 to put as a %)

The Labor Force is the total of employed and unemployed workers.

U.S. unemployment should be about 5%

Employed

- You are considered to be employed if:
 - You work for 1 hour as a paid employee (so part-time workers count)
 - You are temporarily absent from work (illness, strike, vacation)
 - You work 15 hours or more as an unpaid worker (family farms are common)

Unemployed

- Must be looking for work (at least 1 attempt in the past 4 weeks)
- Are reporting to a job within 30 days
- They are temporarily laid off from their job

Types of Unemployment

- **Frictional**: Have skills that are in demand; just need time to find a job (College Graduate)
- **Structural**: Current skills do not match job openings (Factor jobs being outsourced; Flight attendant after 9/11/2001).
 - Frictional + Structural = ***Natural Rate of Unemployment (Full –Employment rate)***
- **Cyclical**: Due to a recession (Requires Government action).
- **Seasonal**: Unemployment based on change in weather or seasons.

Not In Labor Force

- A person who is not looking for work:
 - Full-time students
 - Stay at home parents
 - ***Discouraged workers:*** those who have given up hope of finding a job.
 - Retirees

Inflation

- Definition: Rise in the *general level of prices*
- Reduces the *purchasing power* of money
- Measured with the **Consumer Price Index (CPI)**
 - Reports the price of a *market basket*, more than 300 goods that are typically purchased by an urban household

Calculating Inflation

- CPI in Recent Year – CPI in Past Year
Divided by CPI in Past Year
(Number then Multiplied by 100)

Example: 2002 CPI = 179.9
 2001 CPI = 177.1

Rate of Inflation: $\frac{179.9-177.1}{177.1} = 1.58\%$

Types of Inflation

- **Demand Pull Inflation**: ‘too much money chasing too few goods.’
 - AD Curve will shift to the right, resulting in a higher Price Level and greater Output (up til FE)
- **Cost-Push Inflation**: When the cost of making a product increases, the cost is pushed onto the consumer.
 - AS Curve will shift to the left resulting in a higher Price Level and a decrease in Real GDP.

Inflation: Winners & Losers

- **Winners:**
 - Debtors who borrow money that will be repaid with “cheap” dollars.
 - Those who have anticipate inflation
- **Losers:**
 - Savers (especially savings accounts)
 - Creditors (Banks will be repaid with those “cheap” dollars
 - **Fixed-Income Recipients (retirees receiving the same monthly pension)**

Poverty Terms

- Gini Index = Shows distribution of wealth
- Lorenz Curve = Another way of showing distribution of wealth
- Poverty Threshold = The minimum amount of money a person or family can make to qualify for public assistance.

Consumption and Saving

- As income increases, both consumption and savings will increase.
- The determinants of overall consumption and savings are: (**More money or a positive outlook will increase consumption and reduce savings. Less money or a negative outlook will increase savings and reduce consumption.**)
 - Wealth (financial assets)
 - Expectations about future prices and income
 - Real Interest Rates
 - Household Debt
 - Taxes

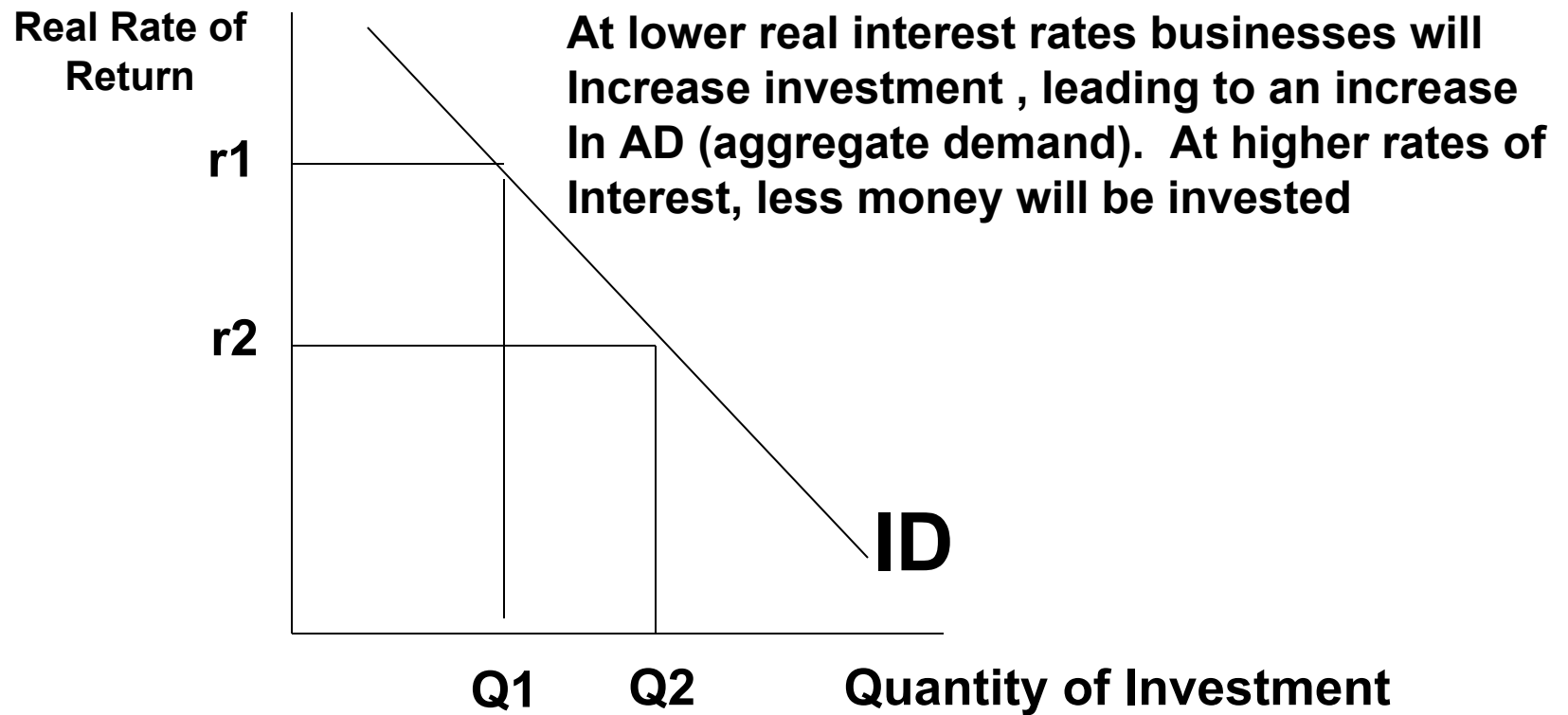
Marginal Cost and Labor

- Marginal = One more of something
- Is it worth making one more item or hiring one more worker

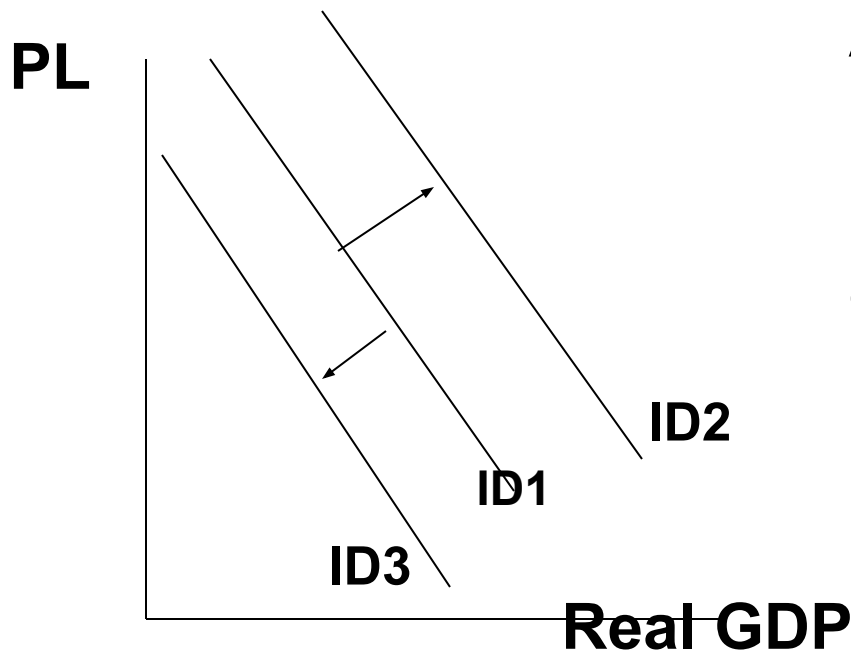
Interest Rate-Investment

- **Expected Rate of Return:** Amount of Profit (expressed as a percentage) a business expects to gain on a project/investment.
- High interest rate = Demand for money goes down
- Low interest rate = Demand for money goes up

Investment Demand Curve:

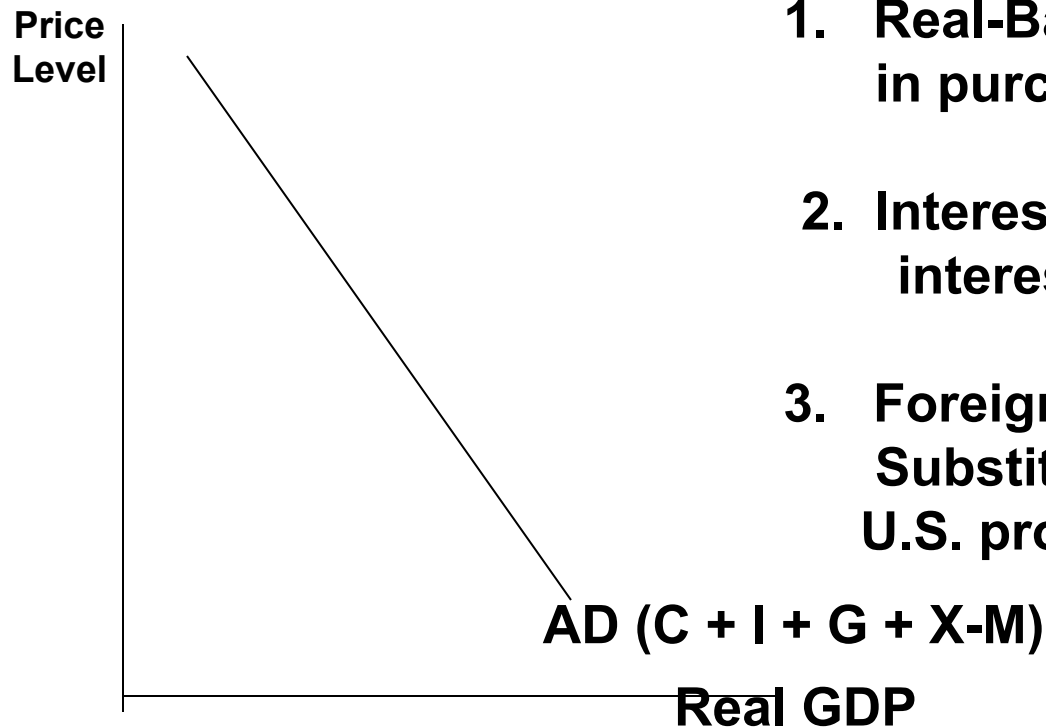


Shifts of the Investment Demand Curve



A shift from ID1 to ID2
Represents an increase in
Investment demand. A shift
From ID1 to ID3 represents a
decrease in investment
Demand.

Aggregate Demand



Downward sloping:

- 1. Real-Balances Effect: change in purchasing power**
- 2. Interest-Rate Effect: Higher interest rates curtail spending**
- 3. Foreign Purchase Effect: Substitute foreign products for U.S. products**

Aggregate Demand

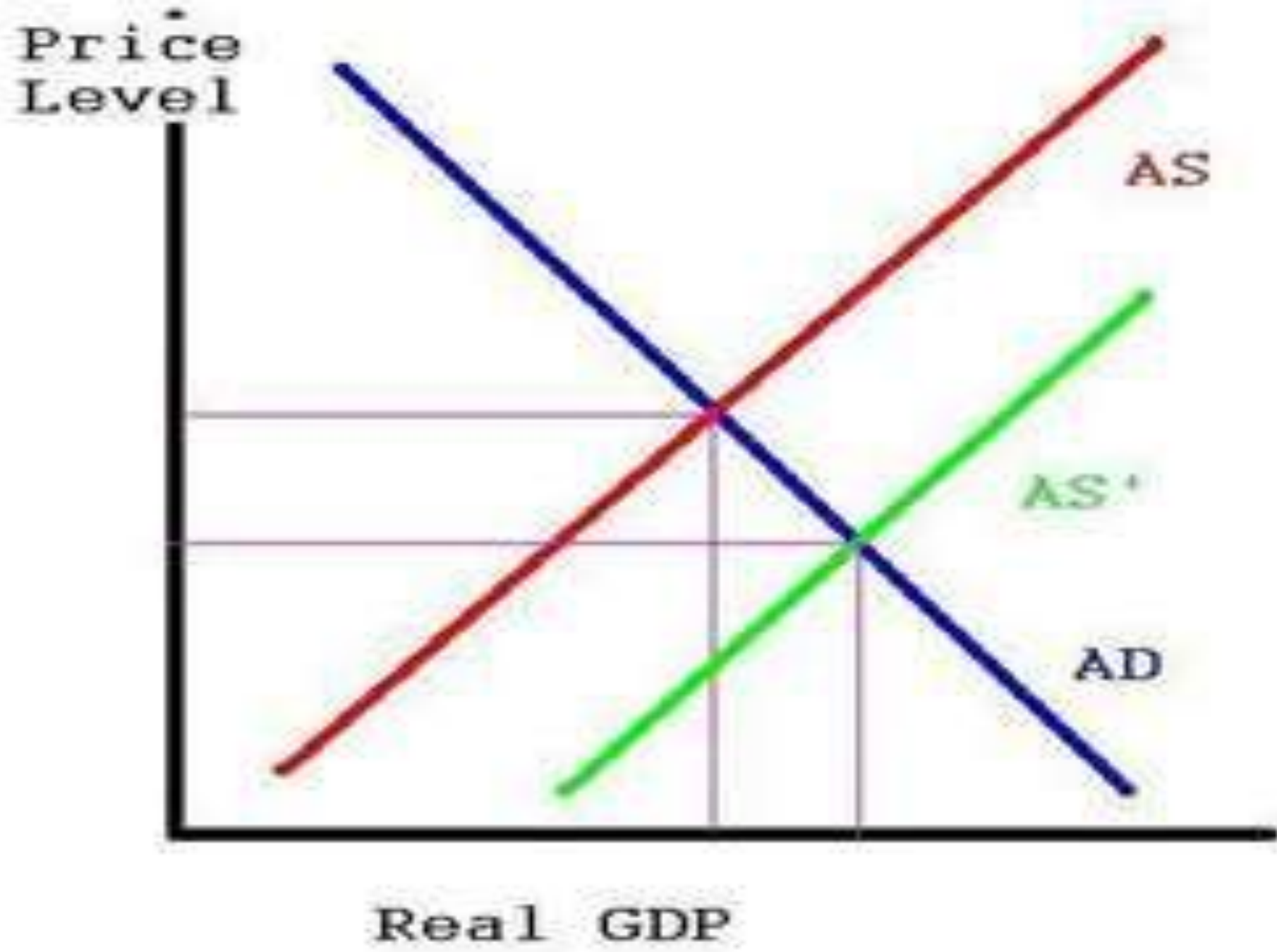
- **Determinants of AD:**
 - **$C + I + G + X - M$ (Yes, its GDP)**
 - **An increase in any of these, due to lower interest rates or optimism will increase AD and shift the curve to the right.**
 - **A decrease in any of these: more debt, less spending, tax increase, will cause a decrease in AD and shift the curve to the left**

Aggregate Demand Determinants

- **Consumption**
 - Wealth
 - Expectations
 - Debt
 - Taxes
- **Investment**
 - Interest Rates
 - Expected Returns
 - Technology
 - Inventories
 - Taxes
- **Government**
 - Change in Gov. spending
- **Net Exports**
 - National Income Abroad
 - Exchange Rates

Aggregate Supply Factors:

- **R:** resource prices (wages and materials, as well as OIL)
- **A:** actions by government (Taxes, Subsidies, more regulation)
- **P:** productivity (better technology)



Fiscal Policy

- Government policy of:
 - 1) Taxing
 - 2) Spending
 - 3) Borrowing

Types of Fiscal Policy

- **Expansionary
(EASY MONEY)**

- Used to Fight a Recession
- LOWER TAXES
- INCREASE GOVERNMENT SPENDING
- INCREASE BORROWING

- **Contractionary
(TIGHT MONEY)**

- Used to fight Inflation
- RAISE TAXES
- DECREASE GOVERNMENT SPENDING
- DECREASE BORROWING

Crowding-Out Effect

- An Expansionary Fiscal Policy as previously diagrammed will lead to higher interest rates.
- At higher interest rates, businesses will take out fewer loans and there will be a decrease in INVESTMENT (I)
- At the same time there will be a decrease in CONSUMER SPENDING (C) as they will take out fewer loans as well.
- This ***CROWDING OUT EFFECT*** will reduce the gain made by the expansionary fiscal policy.

Net Export Effect & Contractionary Fiscal Policy

- A decrease in government spending has led to a decrease in real interest rates.
- At lower interest rates, foreigners demand less U.S. dollars to invest in bonds.
- This leads to a depreciation of the U.S. dollar.
- This leads to an increase in Net Exports, as foreigners now have to exchange less of their currency for the U.S. dollar to buy exports.
- This increase in Net Exports will increase AD and further strengthen the contractionary fiscal policy.

Money Supply Terms

- M1= Checkable Deposits and Currency
- M2= M1 + Savings deposits, money market accounts, small time deposits (less than \$100,000)
- Velocity of Money Equation:
 - $MV = PQ$ (GDP) (M= Money Supply and V = Velocity (number of times per year the average dollar is spent on goods and services).

Types of Taxes

- Proportional
- Regressive (ex. Sales Tax)
- Progressive (Our income tax April 15th)

3 Ways to Control money supply

- **1) Reserve Requirement**
- **2) Discount Rate**
- **3) Open Market Operations**

Reserve Requirement

The Fed has three tools available to adjust the money supply of the nation.
The first tool is adjusting the required reserve ratio.

Reducing Reserve Requirements

- A reduction of the RRR would free up reserves for banks, allowing them to make more loans.
- A RRR reduction would also increase the money multiplier. Both of these effects would lead to a substantial increase in the money supply.

Increasing Reserve Requirements

- Even a slight increase in the RRR would require banks to hold more money in reserve, shrinking the money supply.
- This method is not used often because it would cause too much disruption in the banking system.

Discount Rate

The **discount rate** is the interest rate that banks pay to borrow money from the Fed.

Reducing the Discount Rate

- If the Fed wants to encourage banks to loan out more of their money, it may reduce the discount rate, making it easier or cheaper for banks to borrow money if their reserves fall too low.
- Reducing the discount rate causes banks to lend out more money, which leads to an increase in the money supply.

Increasing the Discount Rate

- If the Fed wants to discourage banks from loaning out more of their money, it may make it more expensive to borrow money if their reserves fall too low.
- Increasing the discount rate causes banks to lend out less money, which leads to a decrease in the money supply.

Government Bonds

- When the government needs money, the federal reserve sell government bonds.
- Bonds = Citizens and Countries loan US money to be paid back later with interest.

Open Market Operations

The most important monetary tool is **open market operations**.
Open market operations are the buying and selling of government securities to alter the money supply.

Bond Purchases

- In order to increase the money supply, the Federal Reserve Bank of New York buys government securities on the open market.
- The bonds are purchased with money drawn from Fed funds. When this money is deposited in the bank of the bond seller, the money supply increases.

Bond Sales

- When the Fed sells bonds, it takes money out of the money supply.
- When bond dealers buy bonds they write a check and give it to the Fed. The Fed processes the check, and the money is taken out of circulation.

The Federal Reserve System (FED)

- Control Monetary Policy
- Headquartered in Washington D.C.
- 12 Federal Reserve Districts
- Board of Governors (7 members) is the central authority
- Members are appointed by the President and confirmed by the Senate

Federal Open Market Committee (FOMC)

- Made up of 12 people: Board of Governors + New York FED President + 4 other regional presidents (who rotate)
- Meets regularly to direct OPEN MARKET OPERATIONS (buying or selling of bonds) to maintain or change interest rates

Banks and Balance Sheets

Banks make their money from interest on Loans

Expansionary Monetary Policy

- 1) Lower Reserve Requirement
- 2) Lower Discount Rate
- 3) Buy government bonds

Contractionary Monetary Policy

- 1) Raise Reserve Requirement
- 2) Raise Discount Rate
- 3) Sell Government Bonds

Effects of an Easy Money Policy

- LOWER INTEREST rates which will lead to an INCREASE in INVESTMENT and CONSUMPTION.
- The U.S. dollar will DEPRECIATE, leading to an increase in NET EXPORTS as well.
- These effects STRENGTHEN the overall monetary policy (opposite of fiscal policy's crowding-out and net export effect)

Effects of a Tight Money Policy

- At the higher interest rates, **INVESTMENT SPENDING, and CONSUMPTION** will decrease.
- At higher interest rates, the U.S. dollar will **APPRECIATE** (foreigners demand more U.S. securities). This will lead to a **DECREASE** in **NET EXPORTS**.
- Again, the Monetary Policy is **STRENGTHENED** as a result, unlike the effects of a contractionary fiscal policy.

Economic Growth

- Five Factors connected to long run economic growth.
- Supply Factors:
 - Increase in natural resources (quantity and quality)
 - Increase in human resources (quantity and quality)
 - Increase in capital goods
 - Improvements in technology
- Demand Factors:
 - Increase in consumption by households, businesses, and government

National Debt (over 14 Trillion and growing)

Functional Finance: A deficit is necessary to balance the economy. The national debt should not be worried about too much.

Causes of the Debt:

1. Wars
2. Recessions
3. Lack of Fiscal Discipline

Concerns:

1. Interest Payments
2. Income Gap (Debt and interest payments held by the wealthy)
2. Crowding Out

National Debt vs. Deficit

- National Debt = The total amount of deficits accumulated over the years
- National Deficit = The yearly debt. During a given year, you spent more than you make.

Economic Philosophies

- ***Classical:*** Believes that the government **SHOULD NOT** interfere in the economy. And believes in self-correction of economic problems.

Free Market

- ***Keynesian:*** Believes that **GOVERNMENT SHOULD** interfere in the economy (taxes, government spending)
- Mixed Economies

Personal Finance Terms

- Mortgage = Loan on a home
- Premium = What you pay for insurance
- Deductable = What you have to pay when you make a claim on insurance.

International Trade

- Comparative Advantage and Specialization allows for economic growth and efficiency. (More of each good can be obtained by trading-Trading line illustrates this)
- Trade barriers create more economic loss than benefits.
- Today there is a trend towards free trade and a reduction in trade barriers.
- Strongest arguments for protection are the infant industry and military self-sufficiency arguments.
- WTO oversees trade agreements and disputes, but has become a target of protesters lately.

Terms

- Comparative Advantage = You can make things more efficiently with less opportunity cost.
- Absolute Advantage = You have more resources than other place.

Trade Barriers

- Tariff = Tax on imports
- Quota = The maximum amount of a resource that is allowed into a country to trade.
- Voluntary export Restraint = limit on quantity of a good that can be exported.
- Safety and Health Regulation = Government forbids unsafe or unhealthy products from coming into the country.

Absolute Advantage

- Absolute Advantage = The condition that exists when someone can produce a good or service using fewer resources than someone else.
- Your country has more resources

Comparative Advantage

- A nation should specialize in producing goods in which it has a comparative advantage: ability to produce the good at a lower opportunity cost.

Example:

	<u>Cheese</u>	<u>Wine</u>
Spain:	2 pounds	2 Cases
France	2 pounds	6 Cases

Spain should produce cheese ($1C = 1W$)

France should produce wine ($1W = 1/3C$)

Currency Terms (Strong Dollar)

- Appreciation: Currency is increasing in demand (stronger dollar)
 - U.S. Currency will *appreciate* when more foreigners: travel less to the U.S., buy less U.S. goods or services, or not buy the U.S. dollar to invest in bonds

Currency Terms (Weak Dollar)

- Depreciation: Currency is decreasing in demand (weaker dollar) Being SUPPLIED in exchange for other currency.
 - U.S. Currency will depreciate when fewer foreigners: travel to the U.S., buy more U.S. goods or services, or sell the U.S. dollar to invest in their own bonds

Strong vs. Weak Dollar

Strong Dollar

- Appreciation: Currency is increasing in demand (stronger dollar)
 - U.S. Currency will *appreciate* when more foreigners: travel less to the U.S., buy less U.S. goods or services, or not buy the U.S. dollar to invest in bonds

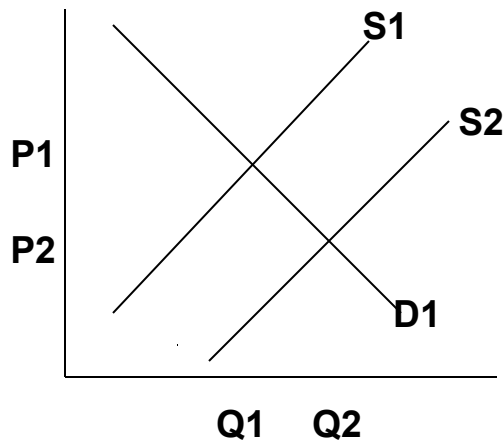
Weak Dollar

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 - U.S. Currency will depreciate when fewer foreigners: travel to the U.S., buy more U.S. goods or services, or sell the U.S. dollar to invest in their own bonds

Foreign Exchange Market

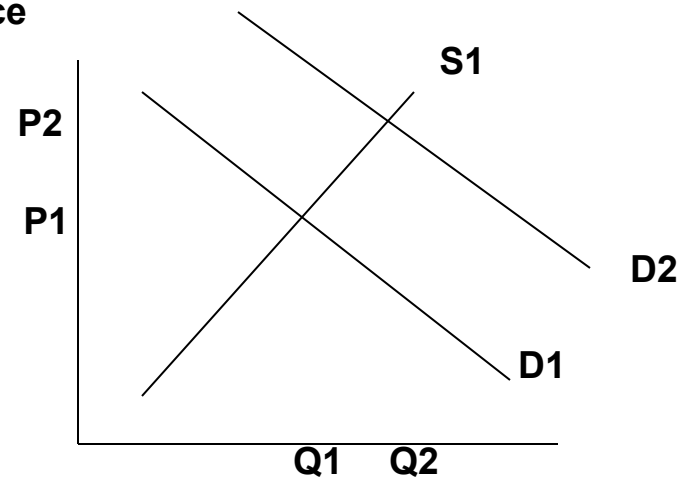
- Let's say a U.S. citizen travels to Japan. This transaction will provide a **supply** of the U.S. dollar and result in a **demand** for yen. It will become cheaper for the Japanese to buy the dollar and more expensive for Americans to buy the Yen. The Yen is **Appreciating** and the dollar is **Depreciating**.

Yen Price of dollar



Quantity of U.S. Dollars

Dollar Price of Yen



Quantity of Yen

Trade Deficit

- Import more than you export

Balance of Payments: The sum of all transactions between U.S. residents and residents of all foreign nations

- **Current Account: Shows U.S. exports and U.S. imports of goods and services.**
- **Capital Account: Shows the U.S. investment (financial as well as capital-plants and factories) abroad and Foreign investment in the U.S.**
- **Credits: A credit are those transactions for which the U.S. receives income (exports, foreign purchase of assets)**
- **Debits: Those transactions that the U.S. must pay for: imports and purchasing of assets abroad.**

Balance of Payments continued

- The Current Account and Capital Account must be equal.
- Official Reserves Account: The Central Banks of all nations hold foreign currency to make up any deficit in the combined capital and current accounts.
- If the U.S. has more credits than debits it finances this difference by dipping into its reserve account.

Free Trade

- NAFTA – North American Free Trade Agreement (Canada, US, Mexico)
- -Eliminate trade barriers
- ASEAN
- European Union

Trade Barriers

- Those actions that protect domestic products and workers.
 - Tariffs
 - Quotas
 - Embargoes
 - Voluntary Restraints
 - Health and Safety Regulations