

# MACROECONOMIC CONCEPTS

Unit 4: SSEMA1-SSEMA3

MACROECONOMICS

- Is the study of the economics of a nation. Macro examines the effects of events on the economy in *aggregate (in total)*. It is important to understand how nations/economists measure and evaluate economic activity.

# SSEMA1

- Identify and describe the Macroeconomic goals of **steady economic growth(1)**, **stable prices(2)**, and **full employment(3)**

# (1) STEADY ECONOMIC GROWTH

- is increasing production of goods and services over time; occurs through factors of production or new technology.
- measure growth through calculating the percentage change in real GDP from one period to the next. Real GDP is the total value of all final goods and services produced within a nation in a given time

$$\text{GDP} = C + I + G + (X - M)$$

Diagram illustrating the components of GDP:

- C: consumption
- I: investment
- G: government expenditure
- X: exports
- M: imports
- (X - M): net exports

## (2) STABLE PRICE

- refers to minimizing increases in the price level over time; allows a country's money to retain its purchasing power over time,
- US Measures their with the Consumer Price Index

$$\text{Inflation Rate} = \frac{\text{CPI}_2 - \text{CPI}_1}{\text{CPI}_1} * 100$$

where:

$\text{CPI}_2$  – is the CPI in the second period

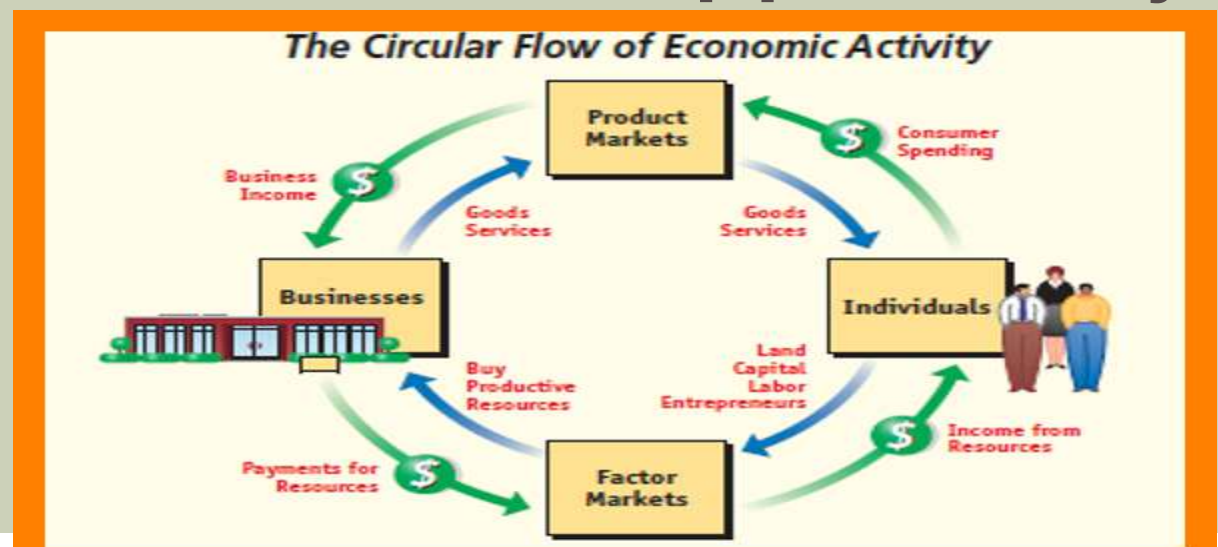
$\text{CPI}_1$  – is the CPI in the previous period

# (3) FULL EMPLOYMENT

- Full employment refers to the state of the economy when virtually all who are willing and able to work have the opportunity to do so.

Unemployment Rate =  $\frac{\text{People looking for work} + \text{people working}}{\text{# Labor Force}} \times 100$

Handwritten notes:   
 - "# Unemployed" is written above the numerator.   
 - "# Labor Force" is written below the denominator.   
 - "people working + people looking for work" is written below the denominator.



## 3 MACROECONOMIC GOALS

- **1. Economic Growth** measured with GDP
- **2. Stable Prices** Measures with CPI
- **3. Full Employment** measures with the Unemployment Rate equation





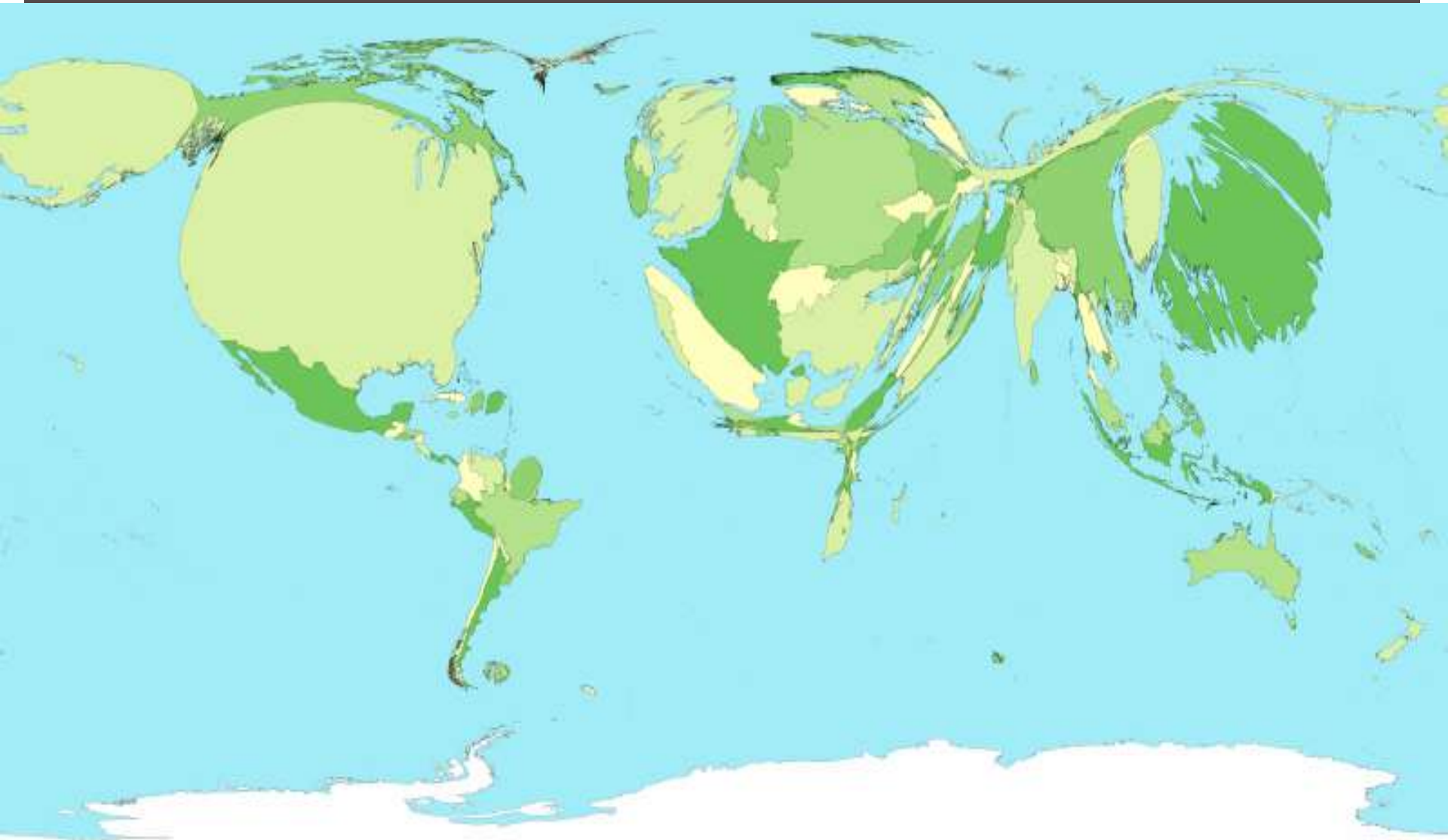
I CAN....

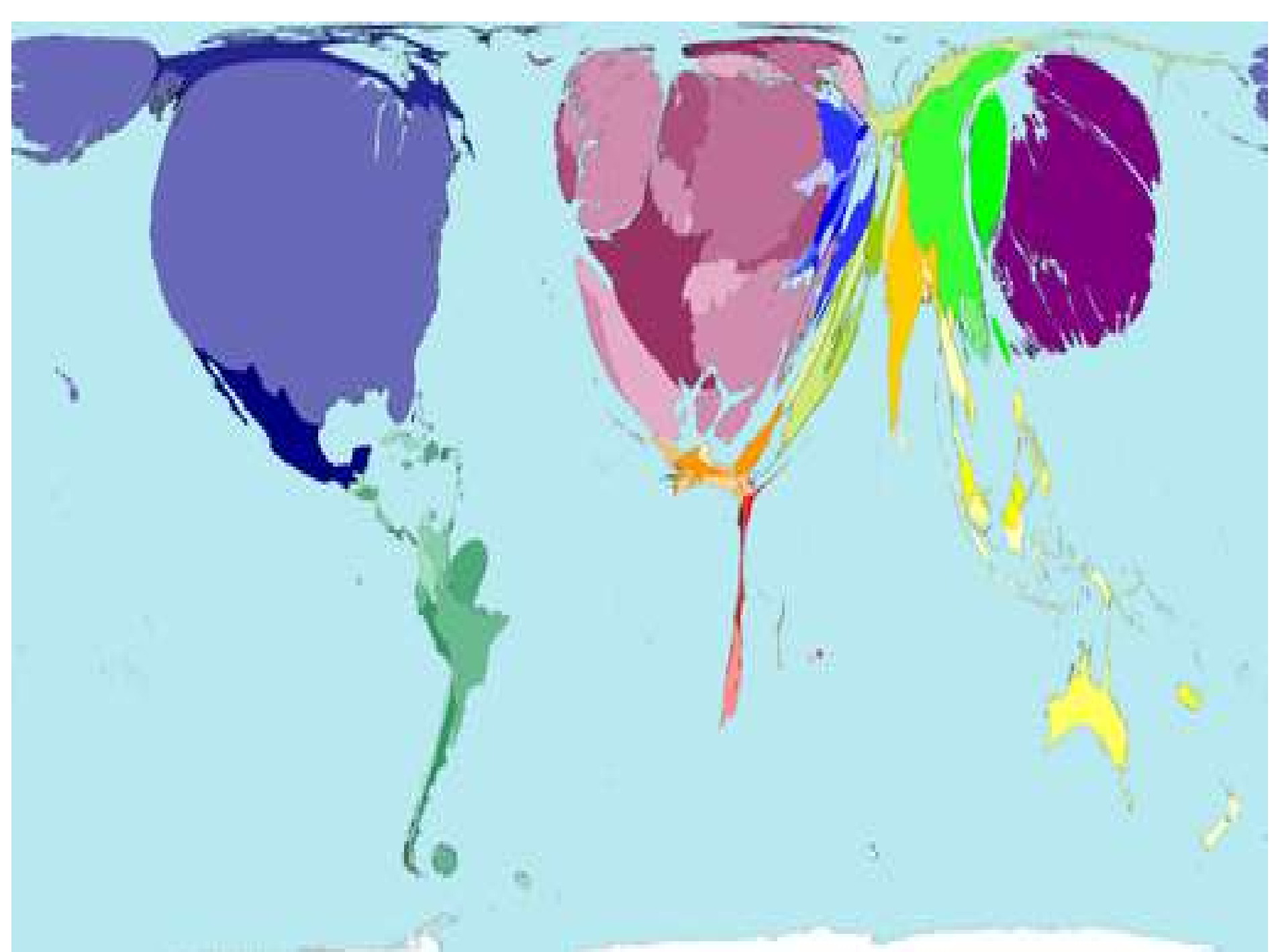
- **Identify the Three economic goals of Macro Economics!!!**

## SSEMA.B

- **Define Gross Domestic product (GDP) as the sum of Consumer Spending, Investment, Government Spending, and Net Exports (Output Expenditure model)**

# GDP-





# GDP

- **Is the Total value of all final goods and services produced in a nation over a time period usually a year. The more final goods and services an economy produces, the healthier it is generally considered to be.**

## ECONOMIC GROWTH CALCULATION

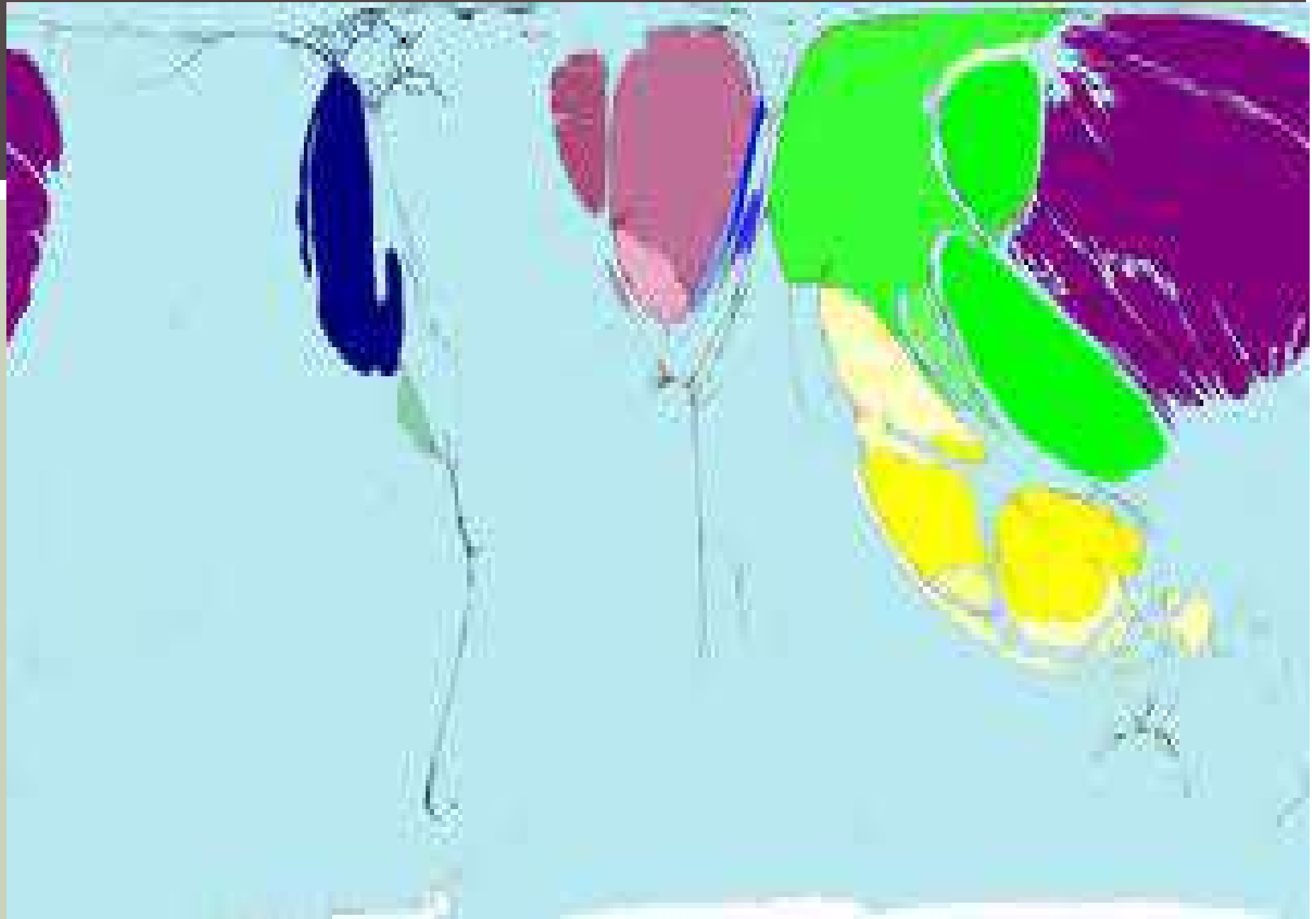
- GDP is equal to the total of all consumer spending, business investment, gov't spending, and net exports.

# NET EXPORTS

- Are the amount of goods or resources a nation is exporting and selling, once one subtracts the amount of total imports from total exports

■ **Total Number of Exports-  
Total number of Imports  
= Net Exports**





- **When looking at the maps of the world based on net-exports and GDP what can be inferred about America?**

# GDP CALCULATION (ECONOMIC GROWTH)

- $GDP = C + I + G + X_n$
- C = consumer spending
- I = Investment
- G = Government Spending
- $X_n = Exports - Imports$

# OUTPUT EXPENDITURE MODEL

- The method of calculating a country's GDP

# QUESTIONS

- Why do countries strive to have high net-exports?
  - If a country has a low net-export what does that mean for the country?

## SIDE NOTE.....

- The reason we subtract our imports from our exports is this: The money other countries spend on our exports adds value to our economy, while the money we spend on goods imported from other countries takes money out of our economy.

# ECONOMIC GROWTH

- Sustained period which a nation's total output of goods and services increases.

- (Summary)

# STOP NOTES

- Pass out 13.2 from ECON Alive
- Complete the following!
  - 1. Give an example from the reading of an economic activity included in GDP, and explain why it is included. Also give an example of an economic activity not included in GDP. Explain why it is not included.
  - 2. Complete the following table:

	Definition	How is it Measured
Nominal GDP		
Real GDP		
Per Capita GDP		



# UNEMPLOYMENT



# SSEMA.C

- Define Unemployment Rate, Consumer Price Index (CPI), inflation, real GDP, aggregate Supply and Aggregate Demand and explain how each is used to evaluate the Macroeconomic goals.
- What are the goals?



- **State of working for less than one hour per week for pay or profit while being available and having made an effort to find a job during the past month.**

# SSEMA1\_C: UNEMPLOYMENT RATE

Unemployment Rate =  
Number of people looking  
for work

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Number of people in labor  
force =  $X \times 100$ .

# LABOR FORCE

- To be counted in this calculation a person either has a job or is looking for one.



# SSEMA.E

- **Identify types of Unemployment**

# STRUCTURAL UNEMPLOYMENT

- Occurs when skills (human capital) of the labor force do not match those that employers need.





# FRictional UNEMPLOYMENT

- Occurs when people decide not to take a particular job because they are looking for a better job that suits their talents, needs, and desires.



# SEASONAL UNEMPLOYMENT

- Unemployed because employers need their type of human capital during only one part of the year.



# CYCLICAL UNEMPLOYMENT

- Occurs because of a downturn in the economy.



# STOP HERE/PASS OUT 13.3

- 13.3 Unemployment
- 1. Create a drawing that illustrates how to calculate the unemployment rate.
- Represent each component of the formula with an illustration, label, and definition.
- 2. Complete the following table:

Type of Unemployment	Definitin	Example

# CONSUMER PRICE INDEX (CPI)



# • IS AN ECONOMIC INDICATOR

- Measures Inflation
- Measures monthly changes in the costs of goods and services by monitoring the prices of goods and services that are typically purchased by consumers.

# CPI: CALCULATION

Economists add up the total price of a “market basket” or typical items bought by an average family in a month. They compare this *total price* to the *total price* of the same items during a base period (the year before)

**CPI =**

**Cost of today's Market Basket**

**x 100**

**Cost of market basket in previous  
year**

**(SSEMA1\_c)**



# INDEX IS 100 WHICH IS THE BASE YEAR

CPI= \$1,000 (2007)

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\$960 (2006)

X 100 = 1.04 = 104

Which represents 4% increase.

# INFLATION

- Refers to an increase in the average price of goods and services, increase in price level overtime



# INFLATION OCCURS

- **Consumer demand is high and/or supply is short**
- **The Consumer Price Index is High**

- **Prices increase consumers get less for their money**
- **The Money supply in an economy increases too quickly**

# SSEMA1.D

- Give examples of who benefits and who loses from unanticipated inflation

○ Inflation – rise in the general amount of prices

○ Deflation – decrease in the general amount of prices

# Benefits of Inflation

- More money in the economy
- More demand for products (at the beginning)
- More people will buy/sell



# Who loses?

- People on fixed income are hurt because their paycheck will buy fewer goods and services.
- Lenders who lend at fixed Rates



# Who Wins?

○ People repaying a loan with fixed interest will benefit because they can repay their loan with money that is worth less!

o loan holders who bought before inflation and locked in a relatively low interest rate benefit from high inflation because they pay off a sizable debt with devalued dollars

# The Costs of Unexpected Inflation

Unanticipated inflation is unfavorable because it arbitrarily redistributes wealth among individuals.

For example, it hurts individuals on fixed pensions. Often these contracts were not created in real terms by being indexed to a particular measure of the price level.

There is a benefit of inflation—many economists say that some inflation may make labor markets work better. They say it “greases the wheels” of labor markets.



# STAGFLATION

- **If prices increase but the economy does not grow**

- **Problematic to correct because solutions that address inflation tend to make existing unemployment worse**

# REAL GDP

- The value of current gross domestic product adjusted for inflation (more accurate)

Calculation: Value of the output expenditure model/price index x 100.

- In individual markets, supply and Demand interact to establish prices. In the nation as a whole, aggregated supply and aggregated demand interact to determine whether the economy is growing or declining.

**STOP HERE PASS OUT 13.4**



# AGGREGATED DEMAND

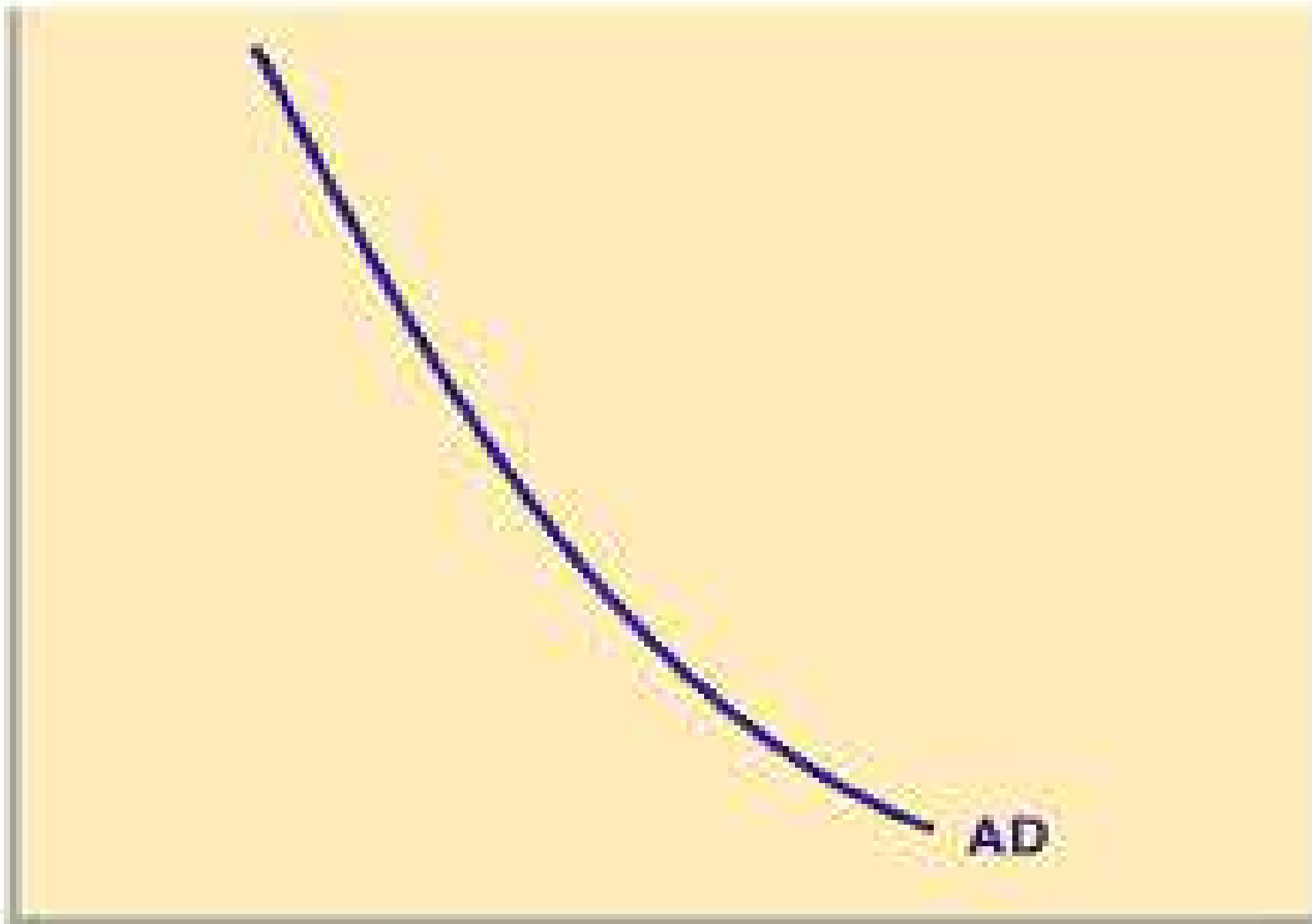
- Is the total quantity of all goods/services consumers are willing and able to purchase at each price level in a given time.

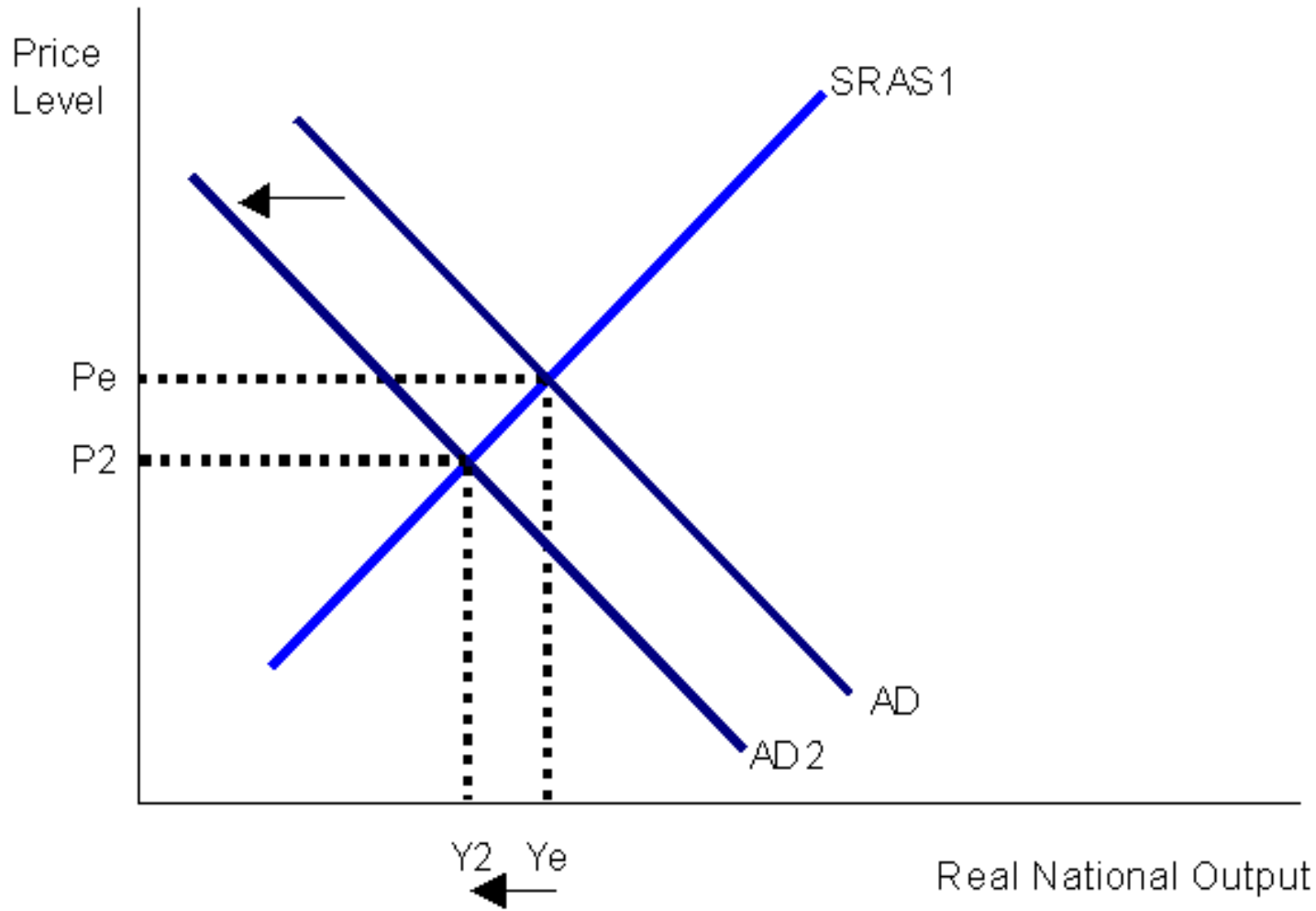
Price level

0

Real domestic output, GDP

AD

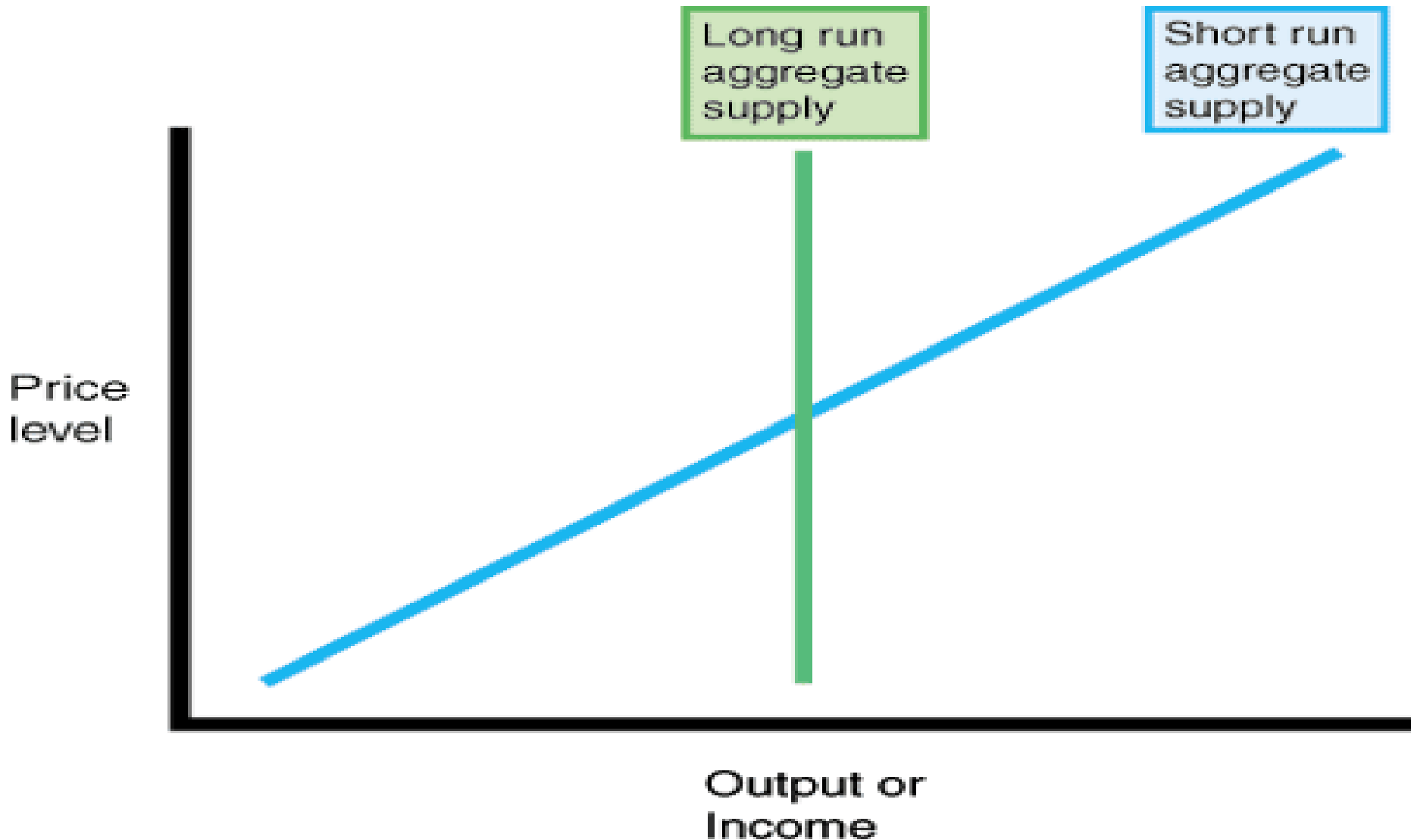




# AGGREGATED SUPPLY

- Is the total quantity of goods/services producers in an economy are willing and able to supply at each price level

# TWO AGGREGATE SUPPLY CURVES



# SHORT-RUN SUPPLY CURVE

- Producers make slightly more goods as prices increase and slightly less as prices decrease...The short-run aggregate supply curve slopes generally upward.

Price Level

$P_2$

$P_1$

$AS_2$

$AS_1$

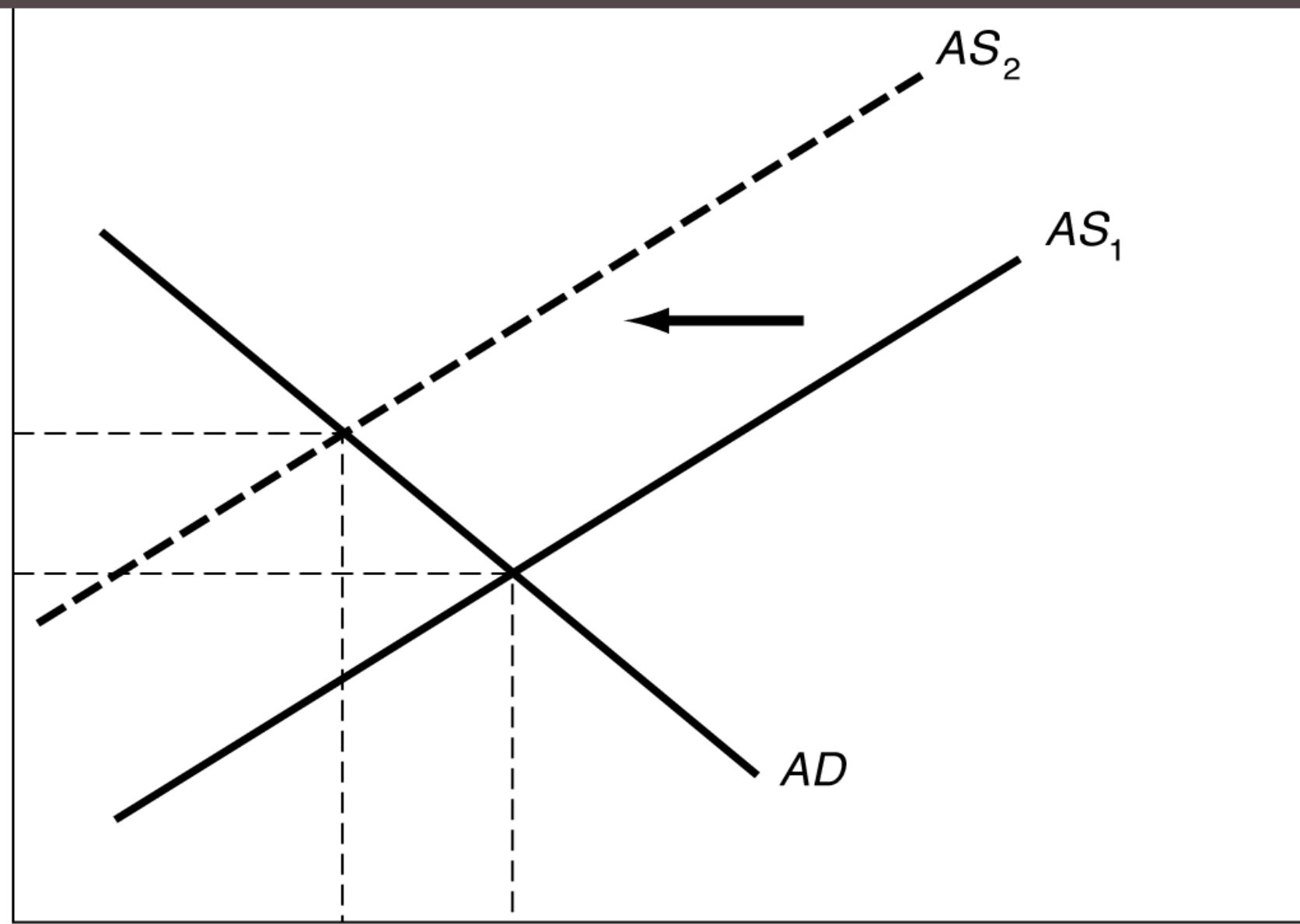


$AD$

$Y_2$

$Y_1$

Real GDP ( $Y$ ) (yen)



# LONG-RUN AGGREGATE SUPPLY CURVE

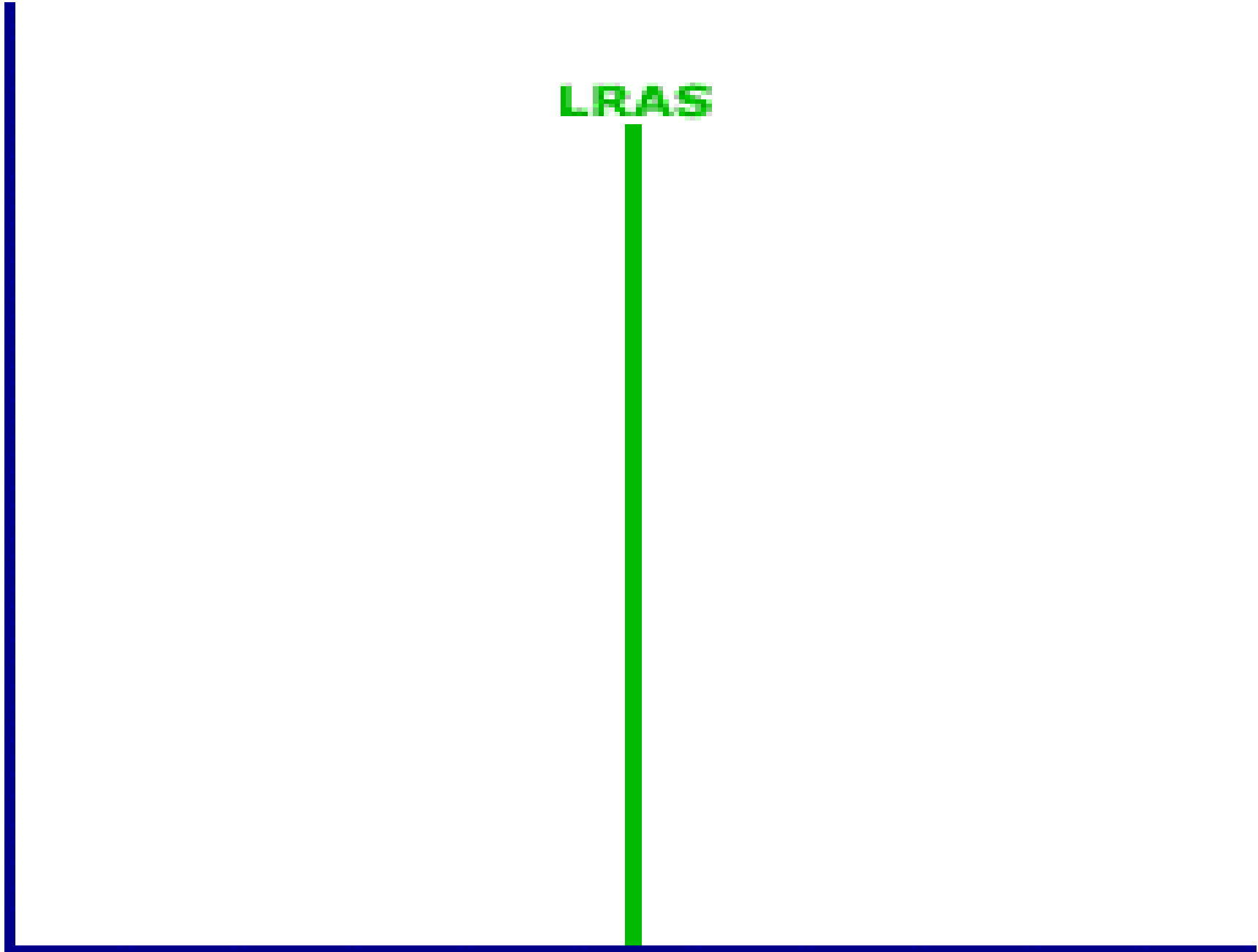
- The total amount that any economy can produce (the real GDP) remains fairly constant, because a nation's real GDP is limited by its resources. For this reason, the ALRSC is a straight vertical line.



**GDP Price Deflator**

**LRAS**

**Real GDP**



- Explain how each of the above is used to evaluate the macroeconomic goals.

# WHAT ARE THE GOALS?

- **Economic Growth**
- **Stable Price**
- **Full Employment**

# HOW IS EACH USED TO EVALUATE THE GOALS?

- Unemployment Rate
- CPI
- Inflation
- Real GDP
- Aggregate Demand
- Aggregate Supply

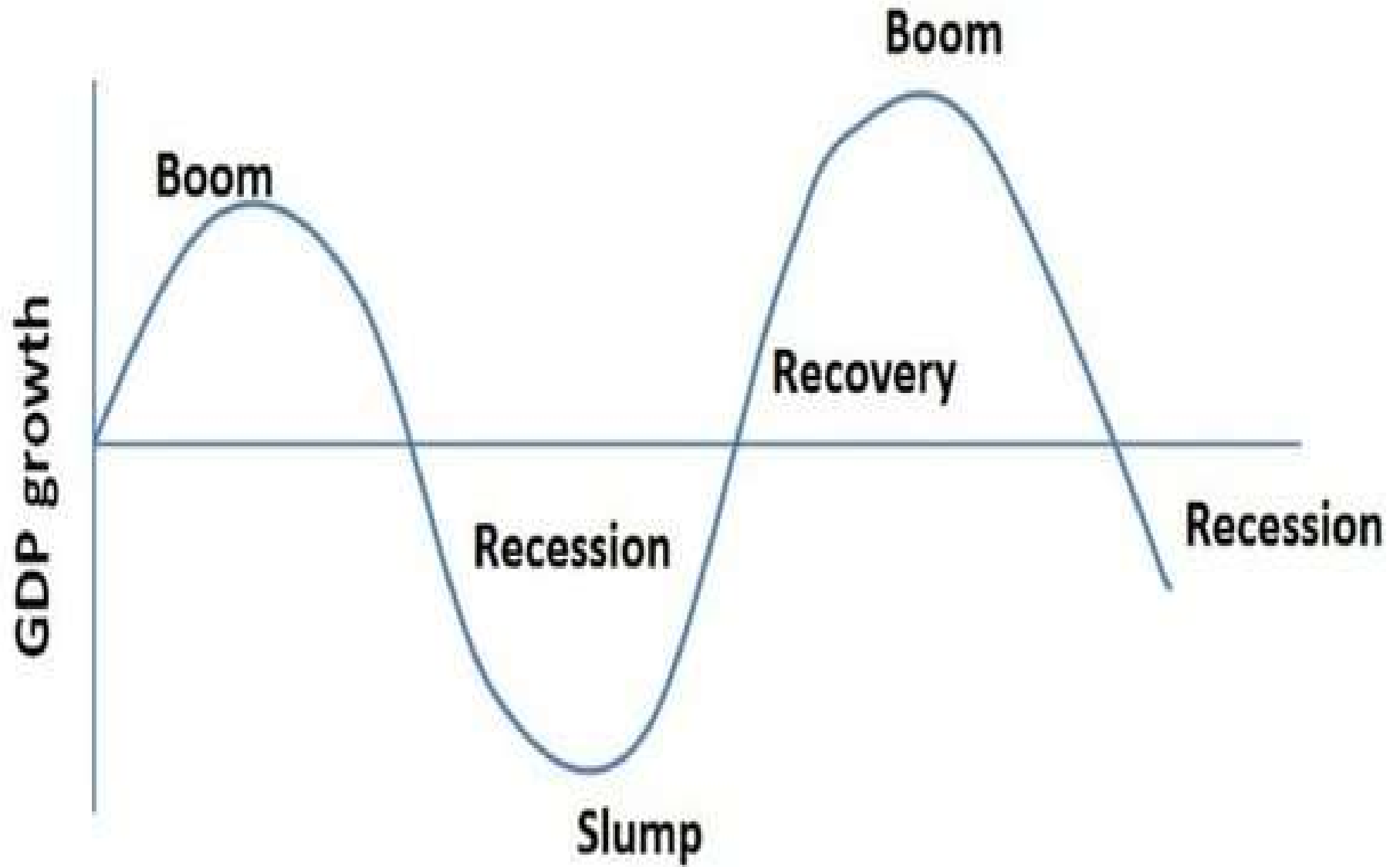
# SSEMA1\_E

- Define the stages of the business cycle, as was recession and depression.

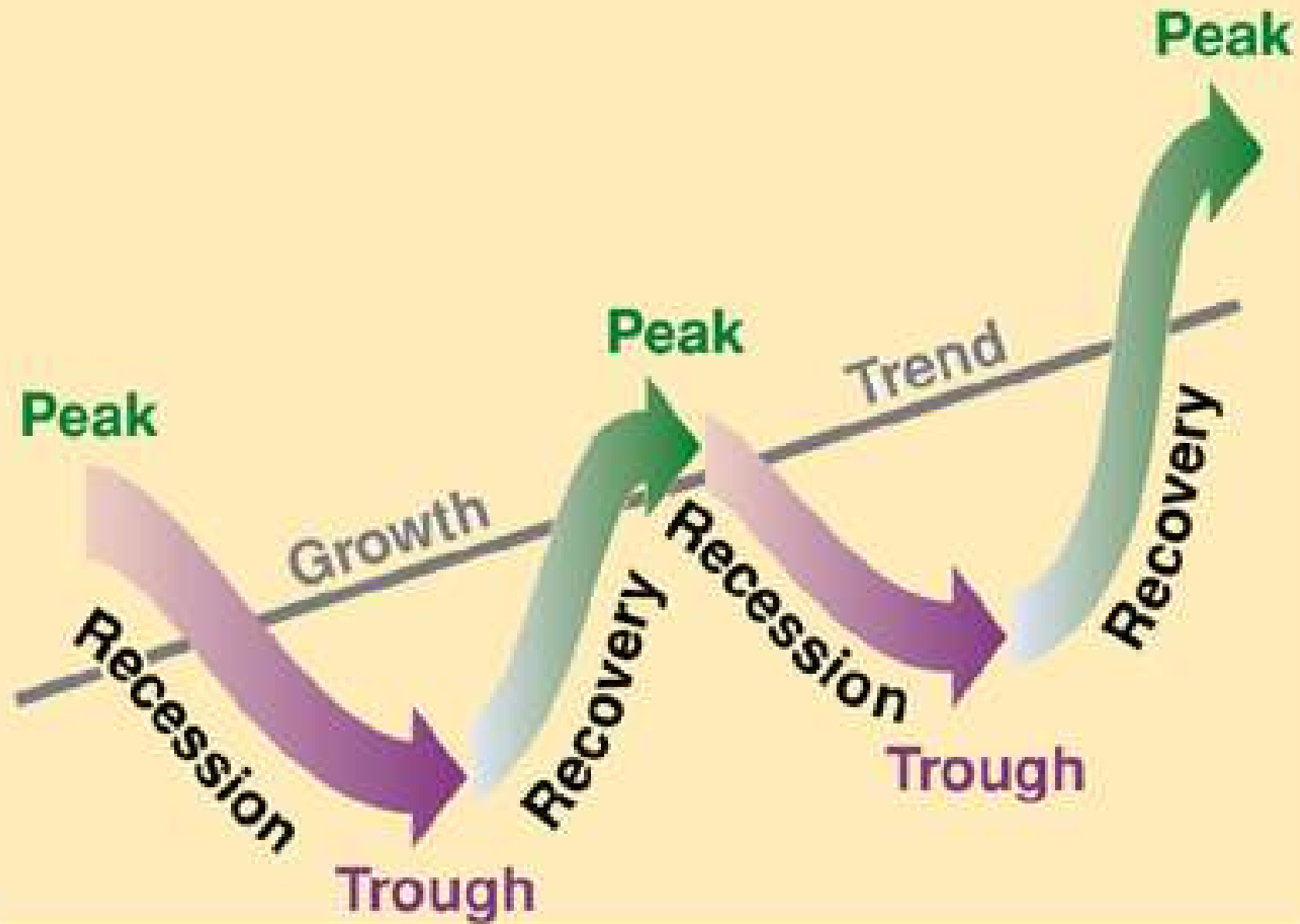
# BUSINESS CYCLE

Ups and downs consisting of  
four parts

Trough, expansions  
(recovery), peak,  
contraction



Level of real output



Time



# EXPANSION TO RECOVERY

- **The economy is growing leading to a recovery because this growth often occurs after a less prosperous period**

- **Gov't spending programs, corporate tax breaks, increased investments or even a war increased demand for production can lead to a recovery.**

# PEAK TO PROSPERITY.

- Production is high, low unemployment, and wages increase. The peak only last for a little while as the economy comes down it enters.....

# CONTRACTION====RECESSION

- Fall in production
- High Unemployment,
- Rising Interest Rates
- Declining profits
- Slowdown in capital investments
- Demand falls as consumers stop buying goods

- **Business sell less...they make less**
- **Stop hiring**
- **Lay off employees... increasing unemployment rates**
- **....if this occurs for more than six months the economy is experiencing a recession**

# RECESSION

- A decline in the nation's GDP and/or negative economic growth for a period of more than six-eight months. Eventually the economy hits its lowest point...a Trough.

# TROUGH

- High Unemployment
- Low Economic Production
- Falling Stock Prices
- If it continues over a long period of time the economy can slip into a .....

# DEPRESSION

- Is an extended period of time in which a nation's economy slows severely, causing hardship for households, businesses and the government.



## SSEMA1\_F

- Describe the difference between the national debt and government deficits.

# NATIONAL DEBT

- Each time the government borrows money it adds to the national debt, the total amount of money owed by the federal government.
- Is the sum of all past deficits plus interest.

# GOVERNMENT DEFICITS

- When the government spends more money in a fiscal year than it has brought in

# DEFICIT SPENDING

- Occurs when the government spends more money than it collects in revenue. To finance spending, governments often borrow money by selling bonds.

# SSEMA2

- The Student will explain the role and function of the Federal Reserve System



**IN PLAIN ENGLISH!**

- <http://www.federalreserveeducation.org/resources/IPE/intro.htm>

■ <http://www.federalreserveeducation.org/>

## SSEMA2A:

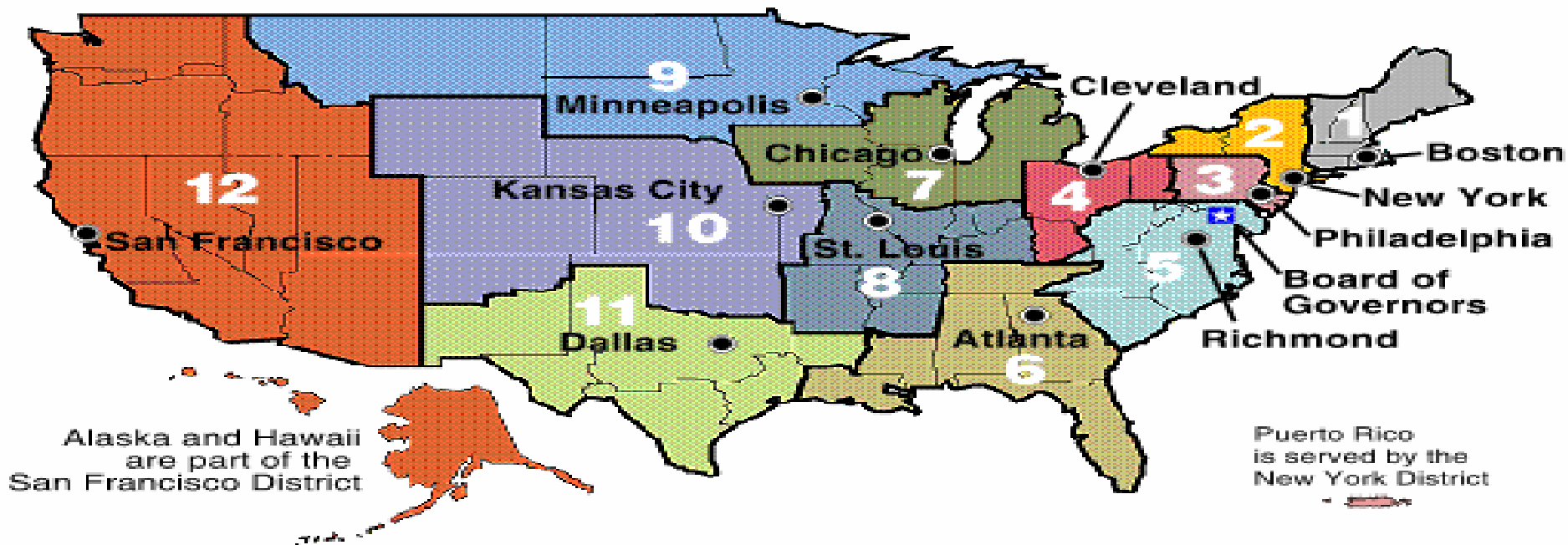
- Describe the Organization of the Federal Reserve System
- The Federal Reserve System-Atlanta Version



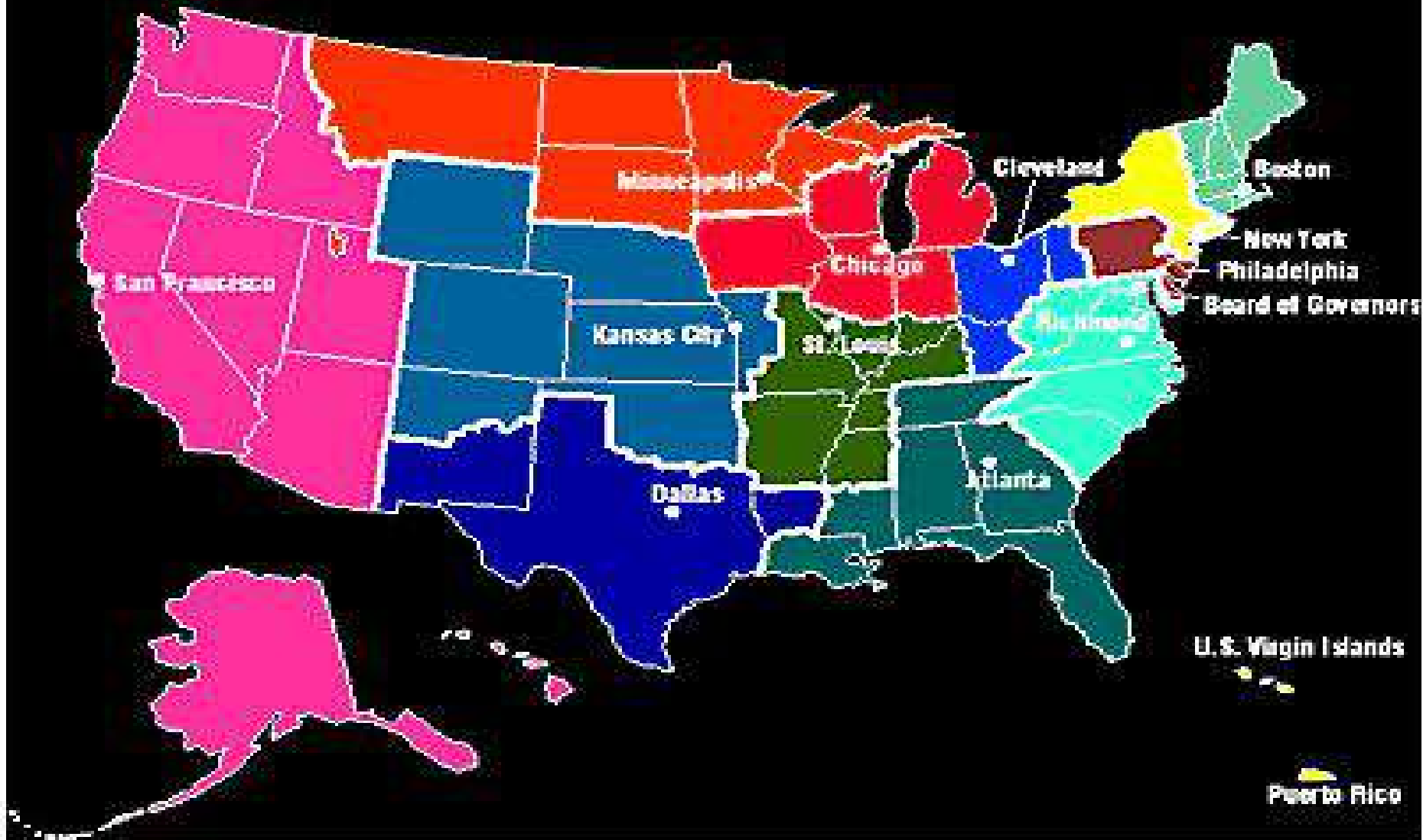
- **“The Fed” was established in 1914. To set Monetary Policy, in order to promote economic growth and full employment and to limit the impact of inflation and recessions.**

- **Make and enforce rules about what banks can and cannot do.**
- **Control *Reserves*: cash available for withdrawals, rather than being invested. Bank reserves are held by the Fed itself and transferred to individual banks as needed.**

- A system of 12 banks in different regions of the nation, each of which prints paper currency called *Federal Reserve Notes*.



# FEDERAL RESERVE SYSTEM



- **The Federal Reserve System is run by a Board of Governors, who are appointed by the U.S. President.**



# **FEDERAL OPEN MARKET COMMITTEE (FOMC)**

**(Decides The Monetary  
Policy of the Fed)**

**Holds the most power in  
regards to day to day  
monetary policy.**



# SSEMA2B

## ■ Define Monetary Policy





- **Decisions of the Federal Reserve System and determine and/or regulate the money supply in the economy**

## SSEMA2\_C

- Describe how the Federal Reserve uses the tools of monetary policy to promote price stability, full employment, and economic growth

# PRICE STABILITY

- **The fed creates policies that help stabilize prices in the market and try to prevent inflation, stagflation results that can lead to a recession**

# FULL EMPLOYMENT

- All individuals that are actively seeking employment have a job or occupation. The fed helps in this process by lower interest rates and the discount rate to help businesses hire more people in the market.

# ECONOMIC GROWTH

- If there is more money circulating in the economy by the Fed's policies, it can help promote growth throughout the entire economy.

# CHARACTERISTICS OF MONEY

- Any type of currency must be portable, durable, dividable, and limited in its availability

# OPEN-MARKET OPERATIONS

- (The sale or purchase of U.S. treasury bonds) to control the flow of money...loaning money to the gov't

- ***Bonds***- document issued by the gov't for which a person pays a certain price now, in exchange for a higher fixed amount, called face value, later. (takes money out of the market).



- **When The Fed sells securities (bonds), it lowers the money supply in hopes to fight inflations.**
- **In the event of a recession the Fed will buy treasury bonds on the open market and congress will cut taxes.**

- **When the feds sell securities, bank reserves of money decrease as households and businesses purchase bonds rather than save their money in banks.**

- **Feds buy securities it is increasing the supply of money back into the economy, This causes interest rates to drop, spending increases, price level with increase, and more money is pumped into the economy.**

## REGULATING MONEY SUPPLY...

- In a recession the Feds buy government securities and lower the discount rate.
  - *Discount Rate*- the interest rate it (gov't) charges to other banks to lend them money.

## SSEMA3

The student will explain how the government uses fiscal policy to promote price stability, full employment, and economic growth.

[http://www.federalreserve.gov/faqs/money\\_12855.htm](http://www.federalreserve.gov/faqs/money_12855.htm)

Fiscal and Monetary spending

- **A. Define Fiscal Policy**
- **B. Explain the government's taxing and spending decisions**

- According to video what are the issues the Government and the Federal Reserve facing with making decisions about Government Spending?
- How did fiscal policy and Government Spending play a role in the Government shut-down?

## FIX-IT LIST: FISCAL POLICY

- FULLY ACCOUNT FOR ALL COSTS IN THE BUDGET.
- STICK TO THESE COSTS, WITH A VETO PEN IF NECESSARY.
- BE READY TO WORK TOGETHER WITH THE OTHER PARTY TO REDUCE THE DEFICIT.
- DON'T FORGET WHAT REALLY COUNTS.



# A. FISCAL POLICY

- **The federal government's decisions it makes about taxing and spending in order to promote economic growth and stability**

- **Any form of money the gov't takes in or spend falls under the fiscal policy umbrella**

# GOAL OF FISCAL POLICY

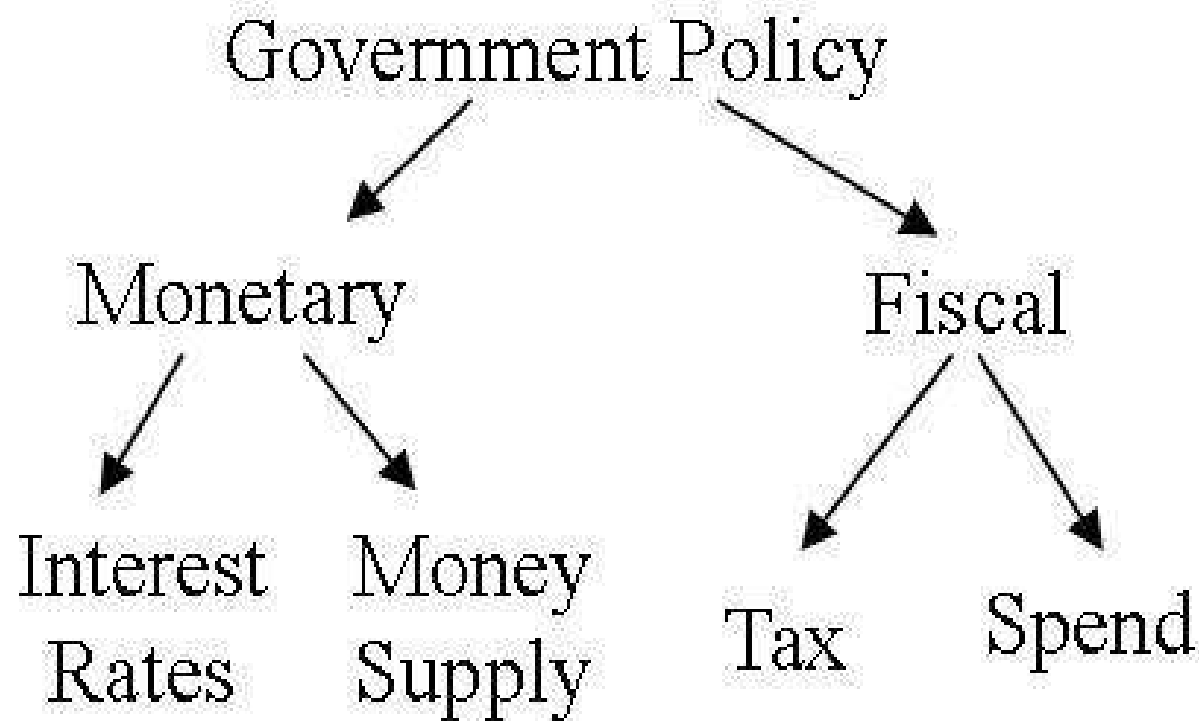
- **Price Stability**
- **Economic Growth**
- **Full Employment**

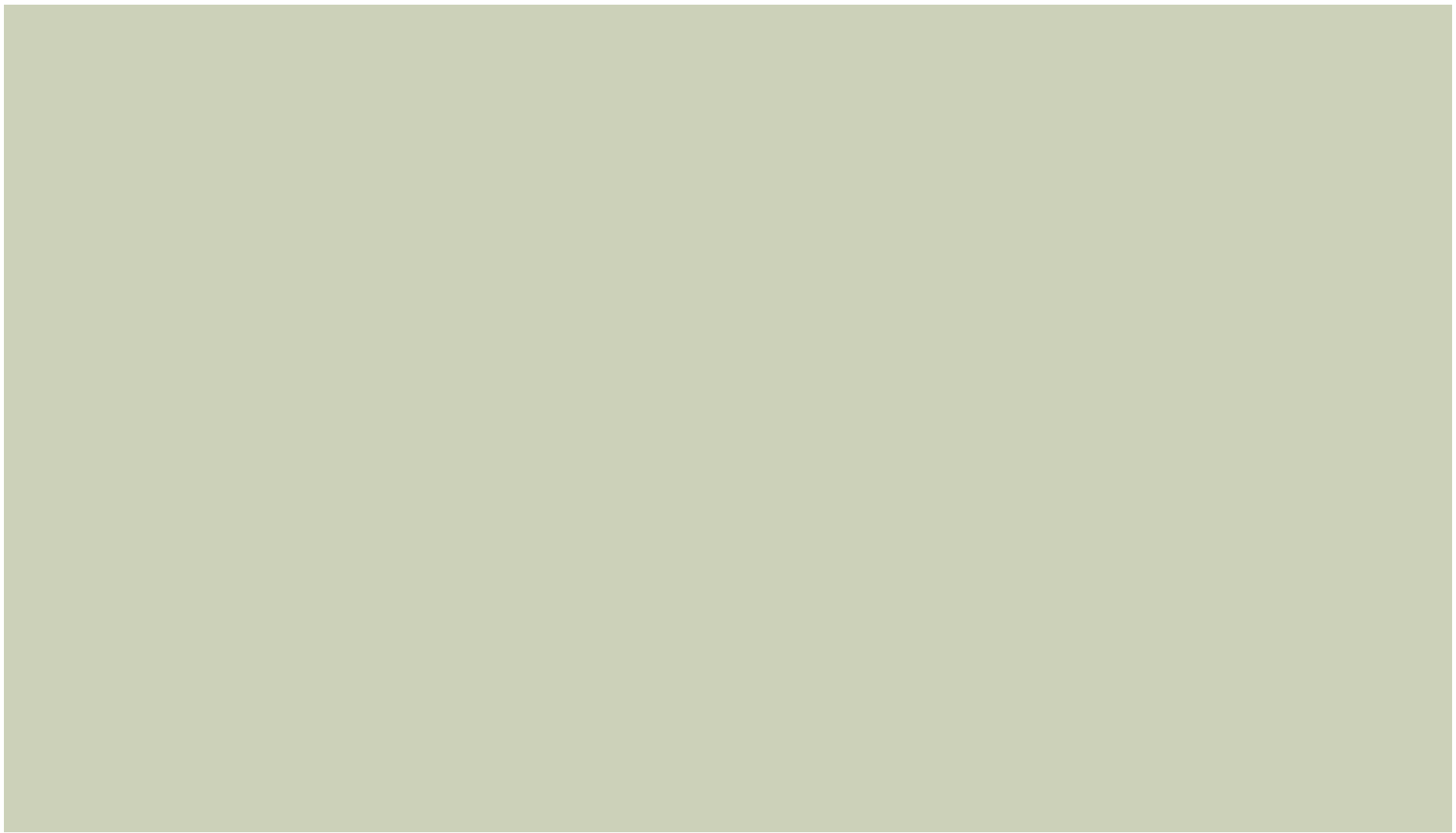
# B. TAXING & SPENDING DECISIONS



- **Taxes- Revenue the government creates from individuals' working wages.**

- **The Federal Reserve and Congress Both want to correct the economy the best combination in achieving this goal is through increasing government spending, sell treasure bonds, but taxes, and buy treasury bonds.**







## ■ The Federal Reserve System