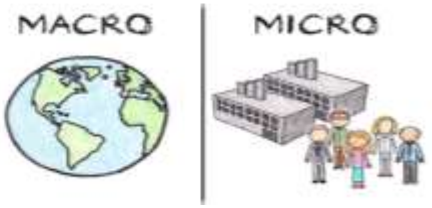
UNIT 4



MACROECONOMICS

Macroeconomics: the branch of economics that deals with the economy as a whole, including employment, gross domestic product, inflation, economic growth and the distribution of income.

Standard SSEMA1

Illustrate the means by which economic activity is measured.

a. Identify and describe the macroeconomic goals of steady economic growth, stable prices, and full employment.

b. Define Gross Domestic Product (GDP) as the sum of Consumer Spending, Investment, Government Spending, and Net Exports (output expenditure model).

Macroeconomic Goals

Countries want steady **economic growth** because it means the economy is moving in the right direction.

Steady economic growth is usually associated with things like:

- entrepreneurs starting new businesses
- firms becoming more productive by adding capital or new technology
- workers becoming more productive through increases in knowledge and skills
- productive resources being available in greater quantities for the economy

Macroeconomic Goals

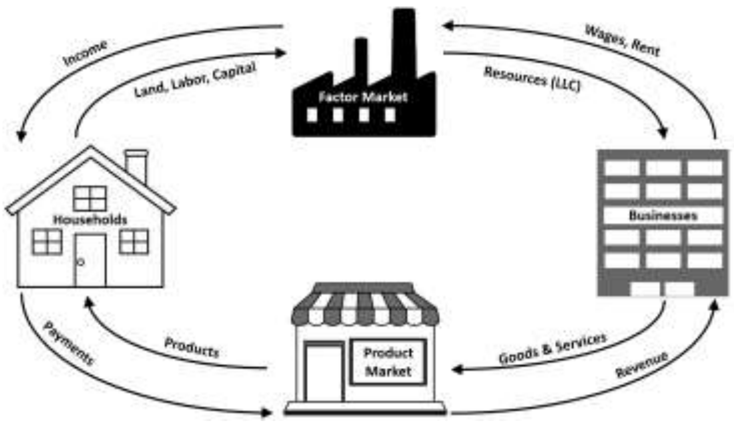
Price stability refers to minimizing increases in the price level over time so that a country's money will retain its purchasing power over time.

Countries want stable prices so individual, firms, and governments can correctly predict how much the money they have now will buy in the future.

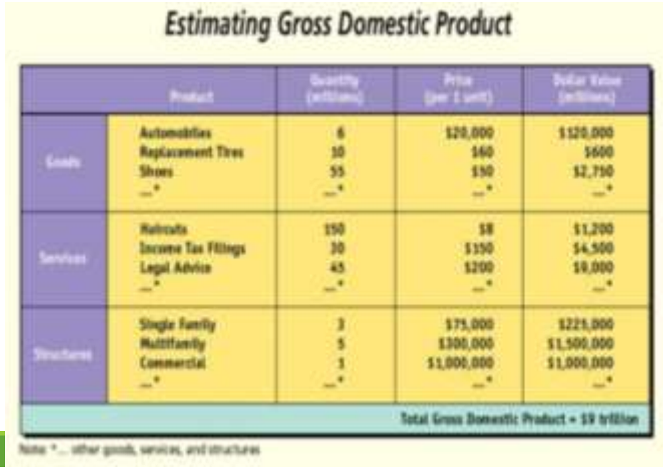
Macroeconomic Goals

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.

Countries want full employment because of the circular flow of the economy. The income people receive from working affects their ability to buy products and pay taxes.



Gross Domestic Product: The dollar value of all final goods and services produced within a nation's borders in one year



Estimating Gross Domestic Product

	Product	Quantity (millions)	Price (per 1 unit)	Dollar Value (millions)
Goods	Automobiles	6	$20,000	$120,000
	Replacement Tires	10	$60	$600
	Shoes	55	$50	$2,750
	—*	—*	—*	—*
Services	Haircuts	150	$8	$1,200
	Income Tax Filings	30	$150	$4,500
	Legal Advice	45	$200	$9,000
	—*	—*	—*	—*
Structures	Single Family	3	$75,000	$225,000
	Multifamily	5	$300,000	$1,500,000
	Commercial	1	$1,000,000	$1,000,000
	—*	—*	—*	—*
				Total Gross Domestic Product = $9 trillion

Note: *... other goods, services, and structures

GDP excludes certain items:

1. **Intermediate goods**: products used to make other products. These require further processing before being sold to the final consumer.

GDP excludes certain items:

2. **Secondhand Sales**: Sales of used goods.

GDP excludes certain items:

3. **Nonmarket Transactions**: work done for which no money is paid such as mowing your own yard, house cleaning or other home improvements.

GDP excludes certain items:

4. **<u>Underground Economy</u>**: unreported legal and illegal activities.

GDP excludes certain items:

5. **<u>Financial Transactions</u>**: money paid for stocks, bonds and other financial assets.

<u>Output-Expenditure Model</u>: a macro model used to show aggregate demand by consumers, businesses, government, and foreign sector.

Aggregate demand = total spending.

<u>Output-Expenditure Model</u>:

- C = Consumer spending by households.
- I = Investment spending by businesses.
- G = Government spending (federal, state, and local)
- X = Exports or goods sold abroad.
- M = Imports or goods purchased from abroad.

Output-Expenditure Model:

$$GDP = C + I + G + (X-M)$$

Output-Expenditure Model:

(X-M) = Net Exports can also be denoted using an (F).

If (X-M) is positive, we have a trade surplus meaning we export more than we import.

If (X-M) is negative, we have a trade deficit meaning we import more than we export.

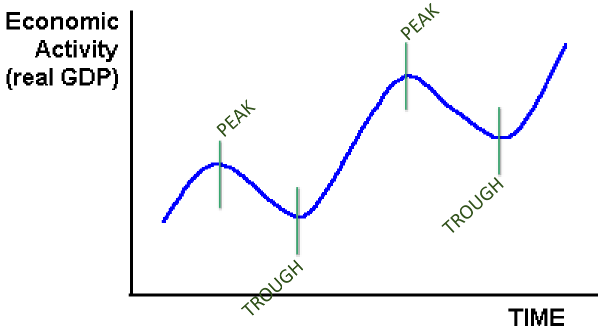
Standard SSEMA1

Illustrate the means by which economic activity is measured.

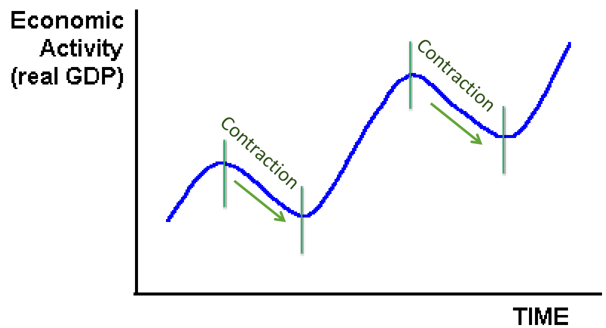
e. Define the stages of the business cycle, including: peak, contraction, trough, recovery/expansion as well as recession and depression.

Business Cycle: the downward and upward movement of gross domestic product (GDP)

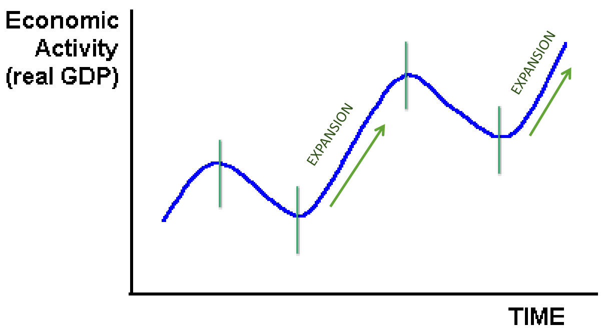
Peak: the turnaround point where real GDP stops going up.
Trough: the turnaround point where real GDP stops going down.



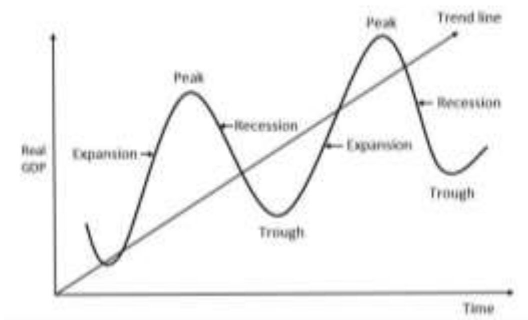
Recession: a period during which real GDP declines for a minimum of 6 months.



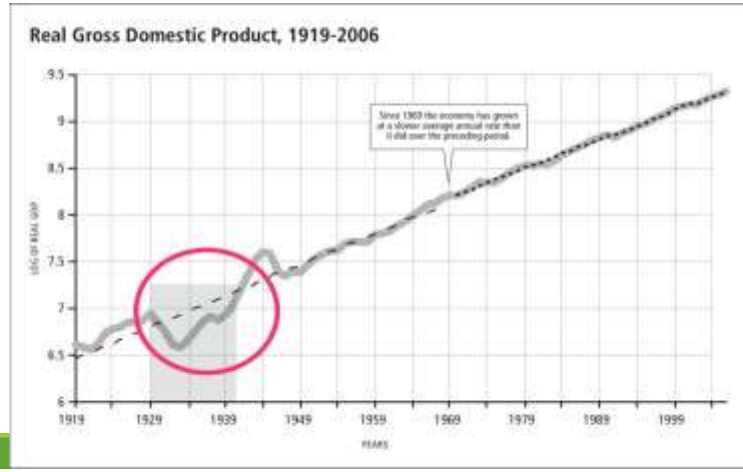
Expansion: a period of recovery from recession where real GDP is rising.



Trend Line: shows the long run growth in real GDP. It's a process of two steps forward and one step back.



<u>Depression</u>: a state of the economy with large numbers of people out of work, acute shortages, and excess capacity in manufacturing plants.



Standard SSEMA1

Illustrate the means by which economic activity is measured.

e. Identify seasonal, structural, cyclical, and frictional unemployment.

<u>Unemployment Rate</u>: the number of unemployed people looking for work divided by the total number of persons in the civilian labor force.

$$UR = \frac{\text{\# unemployed but looking}}{\text{civilian labor force}} \times 100 = \%$$

<u>Civilian Labor Force</u>: those 16 years and older who are currently working or looking for work.

Criticisms of UR

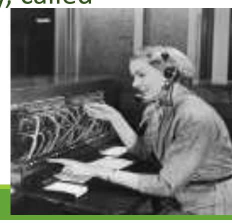
1. **Discouraged workers**: People who have become frustrated with looking for a job and quit looking. This tends to understate the actual rate of unemployment.
2. **Part time workers**: These workers are counted the same as full time workers. Again, this tends to understate the true rate of unemployment.

Kinds of Unemployment

- **Frictional Unemployment**: workers who are between jobs for one reason or another. Also called search and wait unemployment.

Kinds of Unemployment

- **Structural Unemployment**: this is unemployment caused when a fundamental change in the economy reduces the demand for workers and their skills. This if often caused by changes in technology, called automation.



Kinds of Unemployment

- **Cyclical Unemployment**: this is unemployment related to swings in the business cycle, caused by a recession.

Kinds of Unemployment

- **Seasonal Unemployment**: unemployment resulting from changes in the weather or changes in the demand for certain products at regular intervals each year.

Kinds of Unemployment

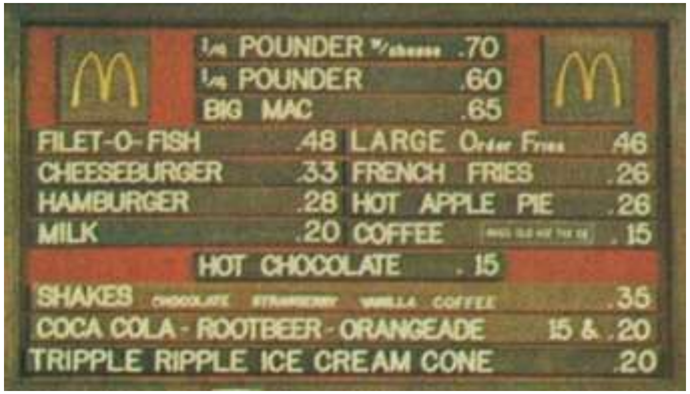
- **Full Employment**: the lowest possible unemployment rate with the economy growing and all factors of production being used as efficiently as possible.
- Our estimate is 4.5% in the United States.
- The first 4.5% represents frictional and structural unemployment. Anything over and above that is cyclical.

Standard SSEMA1

Illustrate the means by which economic activity is measured.

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 from SSEMA1a.

d. Give examples of who benefits and who loses from unanticipated inflation.

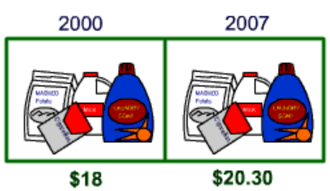


Inflation

- **Inflation**: a general increase in prices.
- To remove distortions of inflation on GDP economists must construct a price index.

Inflation

- **Consumer Price Index (CPI)**: reports on price changes for about 80,000 items in 364 categories used by a typical household.
- It is used to calculate the rate of inflation in the economy.
- **Base Year**: a year that serves as the basis of comparison for all other years.



Inflation

- **Market Basket**: a representative selection of commonly purchased goods and services by urban consumers.

Constructing the Consumer Price Index

Item	Description	Price Base Period (1982–84)	Price Second Period (1998)	Price June (2003)
1.	Toothpaste (7 oz.)	$1.40	$1.49	$2.25
2.	Milk (1 gal.)	1.29	1.29	1.79
3.	Peanut butter (2 lb. jar)	2.50	2.65	3.73
4.	Light bulb (60 watt)	.45	.48	.65
.....	.....	.....	.....	.....
364.	Automobile engine tune-up	40.00	42.00	64.75
	Total Cost of Market Basket:	$1,792.00	$2,920.96	$3,291.90
	Index Number:	100%	163.0%	183.7%

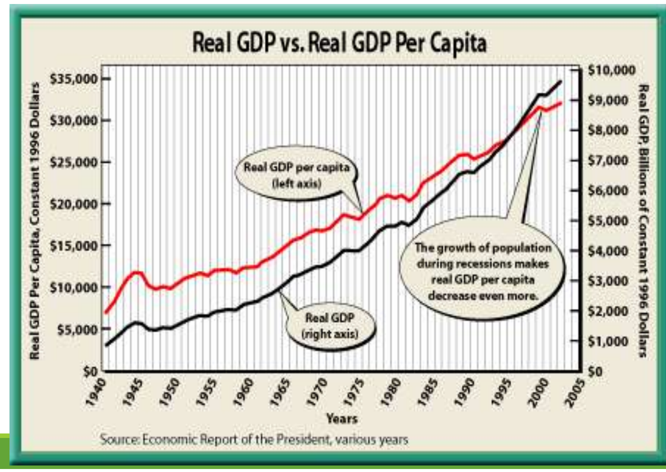
Inflation

- **Nominal GDP**: is GDP that has not been adjusted for inflation.
- **Real GDP**: GDP that has been adjusted for inflation.
- Real GDP = Current GDP ÷ Price Index × 100

Inflation

- There are 2 ways to measure economic growth. Remember economic growth is the ability to produce more goods and services over time.

  1. Changes in real GDP from 1 year to another.
  2. Changes in real GDP per capita which is real GDP divided by population.

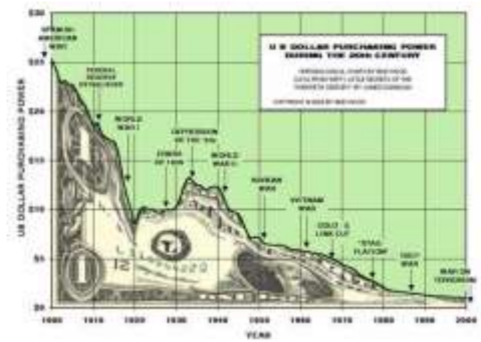


Inflation

- **Deflation**: a decrease in the general/average price level as measured by an index number.
- The effects of deflation are the opposite of inflation.

Inflation

- The immediate result of inflation is a decrease in the purchasing power of the dollar.



Inflation

2 types of inflation include:

- **Demand-pull inflation**: when different groups such as consumers, businesses or the government attempt to spend beyond what the economy can produce. “Too many dollars chasing too few goods.”
- **Cost-push inflation**: when costs for producers rise they will raise prices to compensate for higher costs. This could come primarily from wages or energy/oil prices.

Inflation

Inflation also causes a redistribution of income from some people to others. Some will benefit from inflation while others will be hurt.

Winners	Losers
Flexible incomes	Fixed incomes
Borrowers	Savers
	Lenders