ECONOMIC FLUCTUATIONS AND THE MACROECONOMY

Measuring Economic Health and Gross Domestic Product

Economic indicator: A piece of economic data used to interpret the current, future, or past health of an economy.

Gross domestic product (GDP): A coincident indicator representing the total value of all goods and services produced in a country.

Real GDP: The total value of all goods and services produced in a country, adjusted for price changes such as inflation and deflation.

Potential real GDP: The level of production the economy will move to in the long-run, assuming unemployment remains at a normal rate.

Income approach to calculating GDP:

total income of households
total income of firms
+ total government income (including labor & capital income)

GDP

Expenditure approach to calculating GDP:

consumption: Goods and services consumed by people
investment: Resources used to grow a sector of the economy.
government purchases: military equipment, highway construction, services & salaries for government workers
+ **net exports**

GDP

Circular flow diagram: Depicts the flow of money and products throughout the four GDP factors.

Inflation: The long-term increase in the price level of the economy.

Deflation: The long-term decrease in the price level of the economy.

Consumer price index (CPI): A measure of the price of normal goods purchased by average households. Compared year over year, this is used to calculate the inflation rate.

Menu costs: Costs incurred by firms associated with having to change prices.

Coincident indicator: Shows the current state of the economy.

Leading indicator: Anticipates a particular trend in the economy.

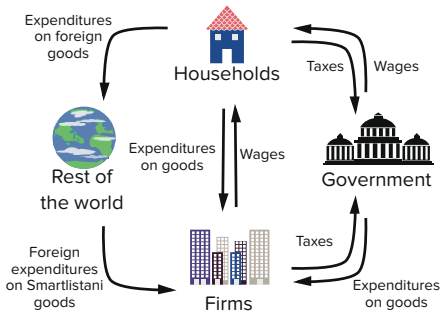
Lagging indicator: Changes after the economy has started following a particular trend.

Labor income: Wages and benefits paid to workers.

Capital income: Interest payments and money paid to landlords and shareholders.

total value of a country's exports
− total value of goods imported to that country

net exports



$$\frac{Prices_{other} \times quantities_{base}}{Prices_{base} \times quantities_{base}} \times 100$$

Cycles and Curves

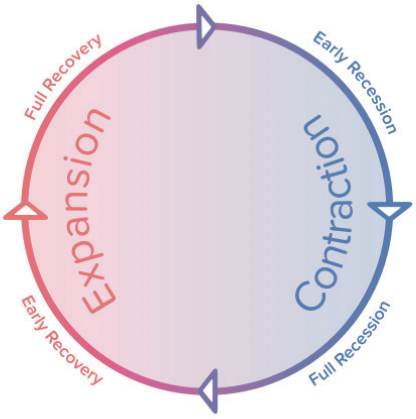
Business cycle: The fluctuation in economic activity over a given time, defined by periods of expansion and recession.

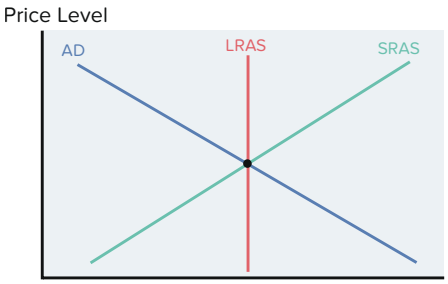
- **Trough:** The bottom or lowest point of the business cycle, which also signals the beginning of expansion.
- **Peak:** The highest point of the business cycle, which also signals the beginning of recession.

Aggregate demand (AD) curve: Represents the total amount of goods and services demanded by the economy at different price levels.

Aggregate supply (AS) curve: Shows all goods and services supplied by firms in the economy at different price levels.

- **Long-run aggregate supply curve (LRAS):** Describes the economy's supply schedule in the long-run.
- **Short-run aggregate supply curve (SRAS):** Shows the relationship between price level and the quantity of goods supplied in the short-run.





How do variables shift the AD curve?

Category of Variables	Variables	Increase in variable	Decrease in variable
government policies	interest rates	←	→
	government purchases	→	←
	income taxes	←	→
foreign variables	exchange rates	←	→
changes in expectations of households and firms		→	←

How do variables shift the SRAS curve?

Variable	Increase in variable	Decrease in variable
labor force and capital stock	→	←
technology	→	←
labor costs	←	→
price of important natural resource	←	→

Phillips curve: Demonstrates the inverse relationship between the unemployment rate and the inflation rate.

Macroeconomic equilibrium: The state where aggregate supply equals aggregate demand.

Keynes solution: When an economy is in recession, the main driver of growth is aggregate demand. Thus, the government should increase AD by increasing spending and decreasing interest rates.

Supply-side solution: When an economy is in recession, the main driver of growth is expanding production or increasing supply. Lowering taxes and reducing government regulations increase SRAS.

Understanding Unemployment

Labor force: All members of the population who are able to work, including the employed and unemployed.

Employed: People who are working.

Unemployed: People who are not working and have looked for employment within the last four weeks.

Discouraged workers: People not included in the labor force who have tried to find employment, failed, and have given up searching.

Labor force participation rate (LFPR): The percentage of the working age population in the labor force.

$$\text{LFPR} = \frac{labor\ force}{working\ age\ population} \times 100$$

Unemployment rate: The percentage of the labor force that is unemployed.

$$\text{Unemployment Rate} = \frac{unemployed}{labor\ force} \times 100$$

Cyclical unemployment exists due to downturns in the economy.

Structural unemployment exists due to mismatches between worker skills and job requirements.

Frictional unemployment exists due to the time it takes to find a job.

Seasonal unemployment exists due to jobs that are only available for a specific season.

The economy is at **full employment** when it is expanding and there is no cyclical unemployment.

Okun's law: For every 1% rise in the unemployment rate, a country's GDP will be about 2.5% lower than its potential GDP.