Q3 Study Guide Group G

GDP

- nation's output within a given period of time.

The components of GDP:

- Consumer spending
- Investment
- Government
- Net Exports
- $GDP = C + I + G + (I - E)$

Real and Nominal

- Nominal GDP: is GDP evaluated at current market price so includes changes in inflation and deflation.
- GDP deflator: index of the price level
    - $GDP\ Deflator = \frac{nominal\ GDP}{real\ GDP}\ x\ 100$

INFLATION

$$Inflation\ rate = \frac{price\ level\ in\ year\ 2 - price\ level\ in\ year\ 1}{price\ level\ in\ year\ 1}\ x\ 100$$

$$nominal\ inflation\ rate = real\ interest\ rate + expected\ inflation$$

- a sustained rapid increase in prices as measured by some broad index over months or years.
    - Unexpectedly high rates of inflation benefit borrowers and hurt lenders.
    - Unexpectedly low rates of inflation hurt borrowers and benefit lenders.

Real inflation is inflation not adjusted for interest rate.
Nominal Inflation = the real interest + the expected inflation.
Shoe leather cost: the cost in time and energy to counteract the effects of inflation.
Menu costs: costs incurred by the sellers just to update the posted price.
Unit of account costs: costs arising from the way inflation make money a less reliable unit of measurement.

Measurement of inflation

CPI (Consumer price index): the CPI measures only the change in the prices of a "basket" of goods consumed by a typical household. The CPI uses base year quantities rather than current year quantities in calculating the price level index value.

- $$CPI = \frac{\text{base year basket quantities multiplied by current year prices}}{\text{base year basket quantities multiplied by base year prices}}$$

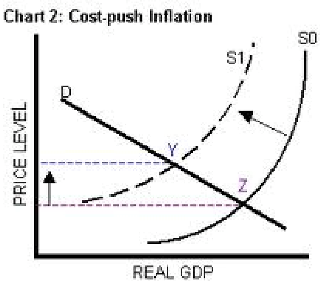
Hyperinflation: extremely rapid or out-of-control inflation.

- is almost always the result of a government that is increasing the money supply to cover national debts.
- The inflationary spiral:
  - As people hold smaller amounts of real money due to a high inflation, the government has to respond by accelerating the rate of growth of the money supply→higher rate of inflation

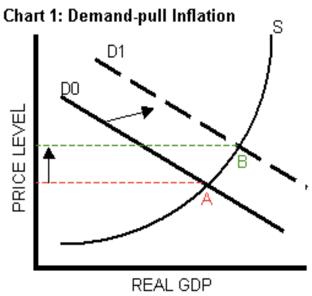
Disinflation: a slowing in the rate of inflation.

Types of Inflation

- **Cost-push inflation**: caused by leftward shift of the SRAS, initiated by a sudden increase in input prices. Example: increase in price of resources.



- **Demand-pull inflation**: caused by rightwards shift in AD.
  - usually caused by economic growth that is coupled with either expansionary fiscal or monetary policy.



Inflation Tax

- The amount of economic suffering that occurs when the implementation of some type of expansionary monetary policy causes the value of cash and the equivalent to decrease.

UNEMPLOYMENT

The Labor Force- The sum of all individuals 16 years and older who are either currently employed or unemployed.

Labor Force= Employed + Unemployed

Labor force participation rate = Labor Force / Adults X 100

Unemployment Rate = Unemployed / Labor Force X 100

However, the presence of discouraged and marginally attached workers results in an understated unemployment rate. Also, underemployed workers mean that the unemployment rate doesn't give a completely accurate portrayal of whether resources are fully employed.

Marginally Attached Workers- Unemployed people who would like to be employed and have looked for a job in the recent past but are not currently looking for work.

Discouraged Workers- Unemployed people who have tired of and given up looking for work.

Underemployed - People who work part time because they cannot find full-time jobs, or people with vocations that do not match with their potential/qualifications because they cannot find better ones

Types of Unemployment

Frictional Unemployment- Frictional unemployment occurs when someone new enters the labor market or switches jobs. Frictional unemployment can happen voluntarily if a person is seeking a better match for his or her skills, or has just finished schooling, and is usually short lived and not a serious problem.

Seasonal Unemployment- Seasonal unemployment emerges with the periodic and predictable job loss that follows the calendar. For example, agricultural jobs are gained and lost as crops are grown and harvested. Teens are employed during the summers and over the holidays, but most are not employed during the school year. Workers and employers can anticipate these changes, so the damage is minimal.

Structural Unemployment- Structural unemployment is caused by fundamental, underlying changes in the economy that can create job loss for skills that are no longer in demand. For example, a worker who manually tightened bolts on the assembly line can be structurally replaced by robotics. Thus, oftentimes, structural unemployment is caused by technological progress. Government-provided job training and subsidized public universities help the structurally unemployed. This type of unemployment is, also, considered to be the most serious problem.

Cyclical Unemployment- Jobs are gained and lost as the business cycles improves and worsens. The unemployment rate rises when the economy is in contraction, and falls when the economy is in expansion.

Full Employment

Full Employment - The situation when there is no cyclical unemployment in the economy.

The Natural Rate of Unemployment – employment that is generally unavoidable = Frictional Unemployment + Structural Unemployment (5~6% in the US)

Actual Unemployment = Natural Unemployment + Cyclical Unemployment

BUSINESS CYCLE

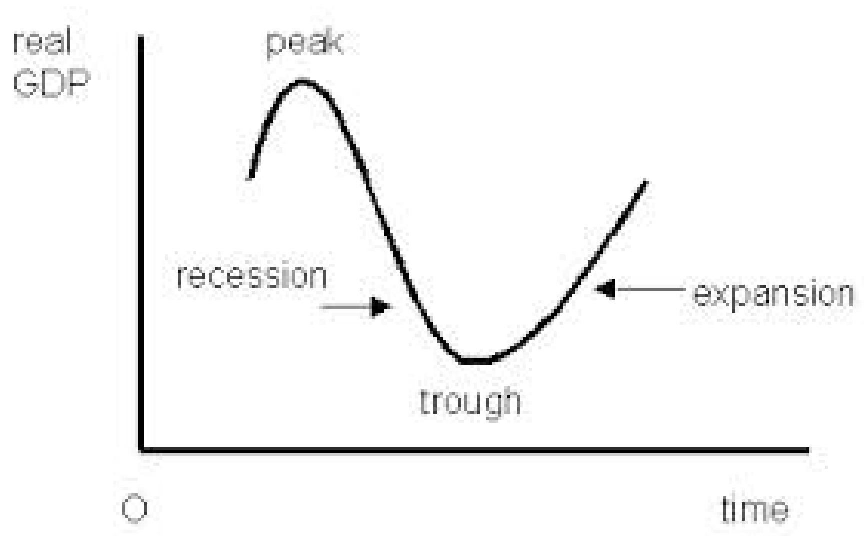
Business Cycle - The periodic rises and falls in economic activity; can be measured by changes in real GDP. There are four phases of the cycle.

Expansion- A period where real GDP is growing

Peak- The top of the cycle where an expansion has run its course and is about to turn down

Contraction - A period where real GDP is falling. A recession is generally described as two consecutive quarters of falling real GPD. If the contraction is prolonged or deep enough, it is called a depression.

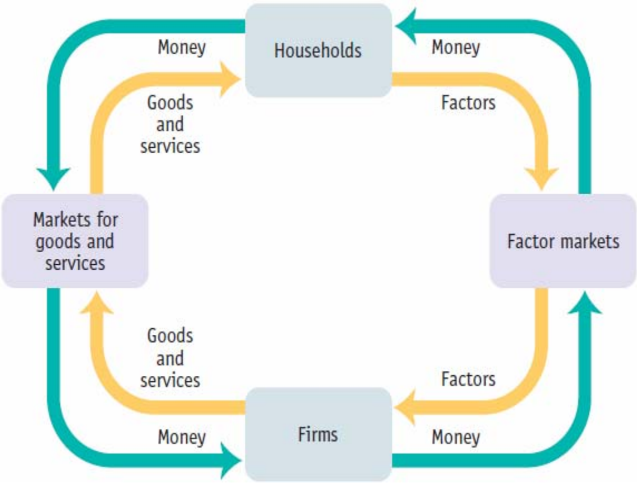
Trough - The bottom of the cycle where a contraction has stopped and is about to turn up



CIRCULAR FLOW MODEL

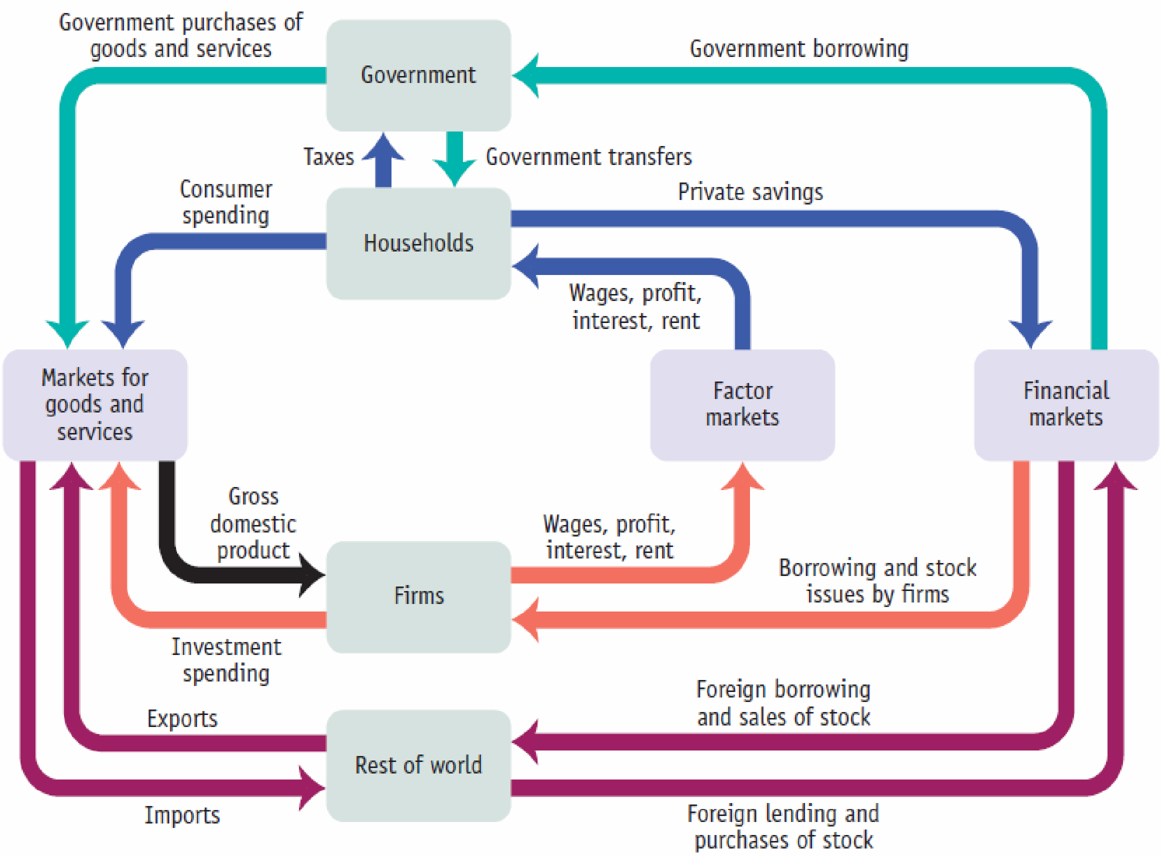
- A circular flow diagram is a simplified representation of the economy that shows the flow of goods and services, money and factors of production through the economy

Simple Circular Flow Graph



*__Households__: individual consumers or groups of people that share one individual's income
*__Firms__: organizations or corporations that produce and sell g&s, employing members of households
*__Markets for goods and services__: also called product markets; where households buy g&s from firms
*__Factor Markets__: where firms buy necessary resources for production; note the labor market

Expanded Circular Flow Graph



*__Government transfers__: payments that government makes to individuals without expecting g&s in return (eg. Medicare, Medicaid, unemployment subsidies)

Disposable Income = income – taxes + government transfers

Private savings: portion of income that is saved

***Financial markets**: where private savings go and where individuals, banks and other institutions buy and financial assets (stocks, bonds, making loans); also receives money from the rest of the world (foreign investments)

***Government borrowing:** government borrowing in the financial markets

***Government purchases of g&s:** funded by government borrowing and taxes

***Exports:** g&s sold to other countries

***Imports:** g&s bought from other countries

***Inventories:** goods and resources that firms hold for production; is a type of **investment spending**

➔ Arrows entering a sector = arrows leaving a sector

MACROECONOMIC GOALS

1. **Full employment**: Achieved when all resources in a country are put to productive use – in other words when the economy is represented by a point on the production possibilities curve.

2. **Stability**: Economists seek to avoid inflationary blooms and recessionary declines of the business cycles by implementing various fiscal and monetary policies.

3. **Economic growth**: measured by the country's increased ability to produce goods and services. Long term economic growth is achieved by an outward shift of the production possibilities curve.

The pursuit of one macroeconomic goal is often accompanied by a tradeoff of another.
- Example: A country implements inflationary policies to reduce unemployment, but upsets the stability of the economy by causing high levels of inflation.

QUESTIONS

1. What are three macroeconomic goals? How might the pursuit of one compromise another?
2. Draw a circular flow diagram including the government, financial market, and the rest of the world.
3. Draw a business cycle and label the four phases.
4. What are components of GDP?
   A: Consumer spending, investment, government spending, and net exports.
5. Identify the winners and losers of inflation.
   A: Unexpected high inflation rates benefit borrowers and hurt lenders while unexpected low inflation rates hurt borrowers and benefit lenders.
6. There are 400 adults in Danielia, of which 300 are looking for jobs and 40 are unemployed. How large is the labor force and what is the unemployment rate?