

Exercise 1

Introduction to Macroeconomics

1. What are the four macroeconomic agents? What are the three markets in which the agents interact?

4 macroeconomic agents

- Households
- Firms
- The government
- The rest of the world

3 markets

- The goods & services market
- The labor market
- The money (financial) market

2. What is sticky price? Explain why price may be sticky.

Sticky price is the prices that adjust slowly to the equilibrium, so the market takes time to clear due to the minimum wage policy, employment contract, and labor union.

3. Explain the four main categories of unemployment.

1. Frictional unemployment is when people looking or switching jobs.
2. Structural unemployment is the result from changes in structure of economy, so people loss their jobs.
3. Cyclical unemployment is when the business cycles fluctuate.
4. Seasonal unemployment is when the seasons change, so people will get their jobs only that season.

4. Classify the following events into the categories of unemployment.

- Some friends just graduated from college and have been looking for jobs.

Fictional unemployment

- Christine lost her job as a biologist at a biotech-company when the whole industry went into recession.

Cyclical unemployment

- Gerhard, who used to be a taxi driver, stopped looking for a job three months after he lost his job.

Discouraged worker

- Dirk used to work as a wooden-doll maker. Now all kids want plastic dolls, so he is out of work.

Structural unemployment

- The hotel part-timers were laid off during low season.

Seasonal unemployment

- Aditi, a high-tech engineer, just decided to quit her job; she is being interviewed for a better-paid job in a multinational company.

Fictional unemployment

- A man lost his job as a public reader as literacy has increased in his village.

Structural unemployment

5. Suppose there are 100 people in labor force and 60 people currently in employment. Find the unemployment rate. Can we find labor force participation rate? If not, what information do we need?

$$\begin{aligned} \text{unemployed} &= 100 - 60 \quad | \quad \text{No we can't because we need the population.} \\ &= 40 \end{aligned}$$

$$\text{unemployment rate} = \frac{\text{unemployed}}{\text{employed} + \text{unemployed}} = \frac{40}{60 + 40} = \frac{40}{100} = 40\%$$

6. What is the discouraged-worker effect? How can it affect the unemployment rate?

Discouraged - worker makes people think that there are many people have got their jobs and makes the unemployment rate falls because it's not include in calculation then the unemployment rate will decrease.

7. On average, nations in Europe pay higher unemployment benefits for longer periods of time than the US. How would this affect the unemployment rates in these nations? Explain which type of unemployment is most directly affected.

The employment rate in Europe will increase more than US because the pay makes unemployed don't want to find jobs.

In this case, it will be frictional unemployment because it's a result of the normal turnover.

8. What is inflation? It is often said that inflation reduces one's purchasing power, and hence inflation is bad. How can inflation reduce one's purchasing power? Is there a case where inflation may not be bad?

Inflation is an increase in the overall price level (good and services) and it can reduce one's purchasing power if their wages are fixed because they receive same incomes but goods are expensive so they can buy less good. Inflation isn't always bad because during inflation, both wages and prices of good rise together at the same time.

9. Who - lender or borrower - is better off, given unanticipated deflation? Explain with examples.

In my opinion, lender is better off when unanticipated deflation.

For example, if I borrow 100 baht from my friend last week, this week the unanticipated deflation comes and decrease the money value. I used 100 baht to bought 10 apples last week, but this week, the lender can get 12 apples from 100 baht.

10. When inflation is anticipated, what will the central bank do with the interest rate? (Hint: Fisher Equation)

The central bank will calculate their return on investment or nominal interest rate by using the real interest rate plus the inflation rate. If inflation rate high, the nominal interest rate will increase too.

$$i = r + \pi \rightarrow i = \text{nominal interest rate}$$

$$\rightarrow r = \text{real interest rate} \quad \rightarrow \pi = \text{inflation rate}$$

11. The CPI is 120 in year 1 and 150 in year 2. All inflation is anticipated. If the bank charges an interest rate of 30%, what is the bank's real interest rate?

$$\begin{aligned} \text{inflation rate} &= \frac{n - o}{o} \times 100 \\ &= \frac{150 - 120}{120} \times 100 \\ &= 25 \end{aligned}$$

$$i = r + \pi$$

$$30 = r + 25$$

$$r = 30 - 25$$

$$r = 5 \rightarrow \text{real interest rate is } 5\%$$

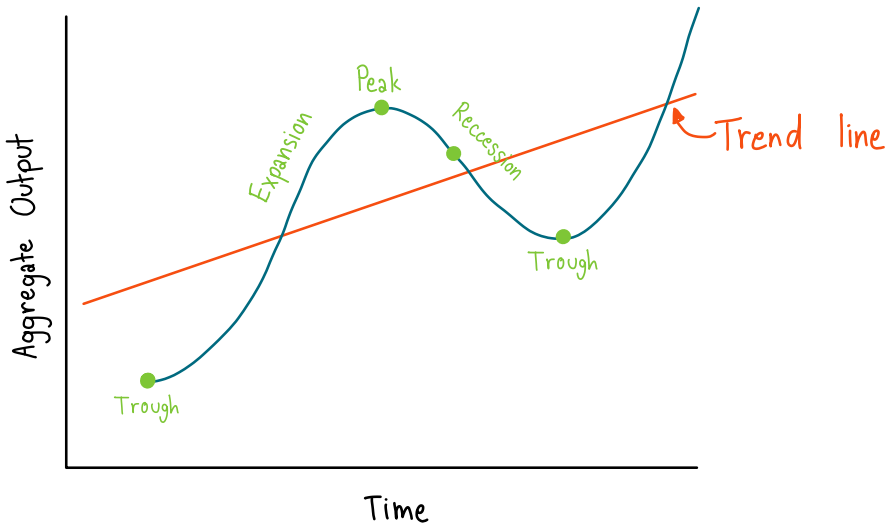
12. Explain why inflation is necessary to a growing economy with reference to the money supply.

Printing money is necessary when the economy and population grow, they need money for their business and it isn't enough cash for them. If money is inadequate, the purchasing power will increase in the future.

13. What are the two administrative costs of inflation? Explain.

1. Menu cost is a cost from changing menus or prices lists frequently.
2. Shoe leather cost is the opportunity cost of holding cash is high when the interest rates are high with anticipated inflation.

14. Draw a diagram of business cycles and the trend line. Label the four phases of business cycles. Answer the following questions.



- Which phase do you expect to see inflation?

Expansion

- Which phase do you expect to see high unemployment?

Recession

- Which phase should the government use expansionary policy? Give example.

Recession, Example: "Aun:Ais" project, it stimulates people to use money.

- Which phase should the government use contractionary policy? Give example.

Expansion, Example: The government increase the tax to slowdown spending.

- What factors determine the trend line?

The quality and quantity of factors of productions (FOP)

15. An article states that capital stock and labor force are both increasing at an annual rate of 7%. The same article also states that real output is growing by 11%. Explain why this is possible.

It's possible because a per-capita output which is a productivity increases. The capital stock and labor force needed to produced output and this output can increase by adopt the quality and quantity.