

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

They are households, firms, governments, and The rest of the world.

Households and Firms : private sector

Government : public sector

Rest of the world : foreign sector.

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

- sticky price is the resistance of market price to change quickly.

- When prices don't react quickly to changes in supply and demand economists so the prices are sticky.

3. Explain the four main categories of unemployment.

- frictional unemployment.

- a normal turnover in the labour mkt.
(When people looking or switching jobs).

- structural unemployment.

- Changes in the structure of the economy
(loss jobs in certain industries).

- cyclical unemployment.

- fluctuations in business cycles
(When construction factory's workers were laid off during Covid-19 recession)

- seasonal unemployment

- Due to changing seasons.

(for ex. ski resort hires to work each winter during the ski season).

3. Explain the four main categories of unemployment.

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

- Some friends just graduated from college and have been looking for jobs. **Frictional 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. **Structural unemployment**
- 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**
- Aditi, a high-tech engineer, just decided to quit her job; she is being interviewed for a better-paid job in a multinational company. **Frictional 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?

labour force = employed + unemployed

$$100 = 60 + 40$$

- unemployment rate = $\frac{un}{em + un} = \frac{40}{100} = 40\%$

- NO, we cannot find the labor force participation rate because we don't know the total of population.

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

- Means that someone has given up looking for a job because they believe there aren't any jobs available.
- When someone becomes discouraged, you may see that the new unemployment rate is higher but it doesn't mean that more people have got their jobs. They became a hidden unemployed

unemployment rate?

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 unemployment rates in the US will increase because it will reduce incentives for unemployed person to search job and end up with having more unemployed.
- Structural unemployment is the most that get directly affected mostly from 2 factors are the intensity of their search and the quantity of jobs available.

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.

When your salary remains the same but prices rise because of inflation, though, your purchasing power will decrease and you won't be able to afford to buy as much as you did.

When there are unused labor or resources. Inflation theoretically boosts production up so that means people will spend more money to get what they want. In the other word, more demand, in turn, triggers more production to meet that demand.

may not be bad.

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

Unanticipated deflation is when the price level decreases when it was expected to increase.

For ex, I borrow 30,000 \$ to buy a new iPhone without a charger and promise to return 30,000 \$ in 2021 but then there is unanticipated deflation so in 2021, you can get a new iPhone PLUS a charger within 30,000 \$ so in this case I am worse off and my friend is better off.

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

- IF the inflation rate is high then Central Bank will set higher nominal interest rate.

But when it falls the Central bank will lower interest rates.

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?

$$\text{Equation: } i = r + \pi$$

$$r = i - \pi$$

$$i = 30\%$$

$$\pi = 25\%$$

$$\pi = \frac{150 - 120}{120} \times 100$$

$$\pi = \frac{300}{12} = 25\%$$

$$\pi = 25\%$$

$$r = 30 - 25$$

$$\therefore r = 5\% \quad \#$$

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

Inflation is a function of the supply and demand for money so that producing relatively money to become less valuable, forcing the general price level to rise.

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

- Menu costs : The cost to a firm resulting from changing its prices.

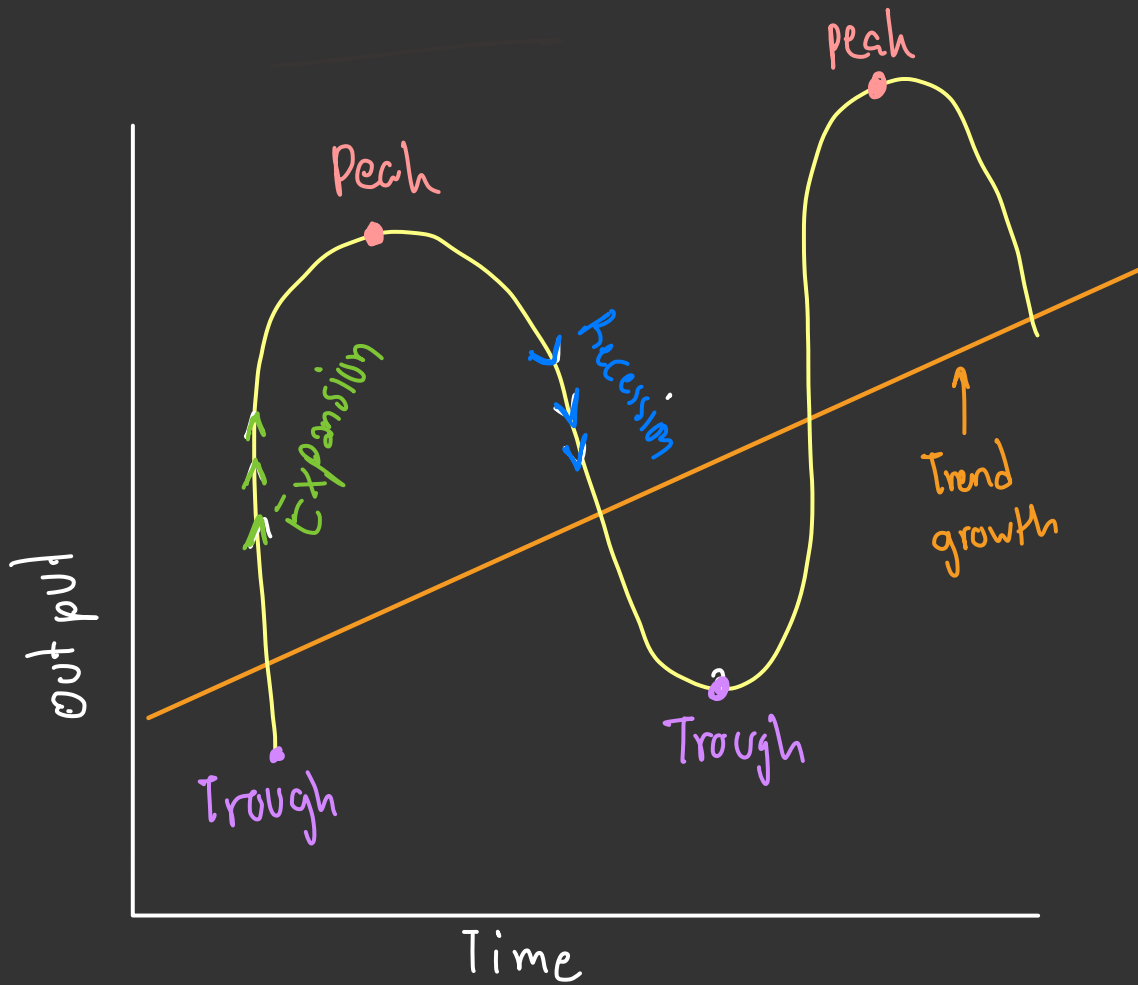
(The cost to a restaurant to change the prices on menu is incurred even with low and expected inflation)

- Shoeleather costs : The cost of time and effort that people spend trying to counter-act the effects of inflation.

(Opportunity cost of holding cash outside bank is high).

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? *Recession*
- Which phase do you expect to see high unemployment? *Trough*



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

- Expansionary policy is most appropriate when an economy is in recession and producing below its potential GDP.

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

- Contractionary policy is most appropriate when an economy is in expansion and producing above its potential GDP.

- What factors determine the trend line?

- Shows that the economy is always moving upwards or growing in the long run.

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.

- When the capital stock grows at the same rate as the labor force so that the capital-labor ratio is constant and there is no effect on the long-run growth rate of the total stock. And when capital stock increases, there will be also an increase in the GDP.