

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

Economic agents are households or organizations that have an impact on our economy. The four main macroeconomic agents are individuals, firms, central banks, and the government. Both ^{individuals} households and firms are placed in the private sector, and the government is under public sector.

These economic agents interact with one another in various different ways, one of them is through the three markets in which it is used to interact with one another. Firstly, the goods and services market, both the government and household buy their goods and services through firms. The firms themselves however, buy goods and services from one another and also supply to the market, this market is the same market where the demand from households, governments and firms are seen. Secondly, the labour market, firms and the government require the use of labor and households are where they acquire such demands. Lastly, the financial market. This is a market where they produce income, from two sources: ~~interest~~ interest on bonds and dividends on stocks. Households, firms, the government and central banks borrow funds from this market for their own purpose reasons. For example, consumption, government bonds or even construction purposes.

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

Sticky price comes from supply and demand. Sticky prices means that the seller of certain goods and services is reluctant to change the price of their price of their goods or services, even if there is a change in input costs or demand. It means that the price of goods are not adjusted quickly to adapt with the change in the economy. In other words, when this supply and demand start to part ways from one another, prices must adjust to be able to restore the equilibrium. However, when the price does not adjust to the change in supply or demand, there will be an inefficiency in the market.

3 Explain the four main categories of unemployment

Unemployment is a situation when an individual is actively looking for ~~an~~ employment. However, is unable to find work. The four main categories of unemployment are firstly frictional unemployment, which occurs when people willing change their job inside an economy. For example, when a student graduates and is now entering the workforce. This type of unemployment is short-lived and is seen to have the least amount of problems compared to the other categories of unemployment.

Secondly, structural unemployment, this type of unemployment is exactly what it's called, it's the change in the economic structure, this can lead to many individuals losing their jobs. For example, radio stations being replaced by music softwares such as Apple Music or Spotify.

Thirdly, cyclical unemployment, this type of unemployment change depending on the ups and downs in the economy. When the economy is doing well there are more job opportunities, and when it's not doing so well there are less chances for people to get jobs.

Lastly, seasonal unemployment, this type of unemployment is one that fluctuates with the seasons and time of the year. This is because their jobs require a certain time of the year to be able to work. For example, farmers.

4. Classify the following events into the categories of unemployment

a. ~~Case~~ Fictional unemployment, as these students have just graduated and are now entering the workforce.

b. Cyclical unemployment, as the biotech-company went into recession which means that there is a decline in the economic activity which means that this type of unemployment would fall under cyclical unemployment.

c. This would fall under cyclical unemployment, as Gerhard had lost his job this could be due to the fluctuations in the economy, making that the taxi company didn't need him to be driving for them anymore.

d. Structural unemployment, as there is a change in the structure of the economy making Dirk's job not necessary anymore, as kids want plastic dolls and not wooden ones anymore.

e. Seasonal unemployment, as unemployment changes due to the season

f. Frictional unemployment, Aditi has left her job to look for a job that pays her more

g. Structural unemployment, this is because there's is now a change according to the structure meaning that man's need to be a public reader is no longer needed. This may be due to the fact that everyone owns a smartphone and can download audio books and listen to them instead

5. The unemployment rate is 40%

$$\text{unemployment rate} = \frac{\text{unemployed people}}{\text{labor force}} \times 100$$

$$\text{unemployment rate} = \frac{40}{100} \times 100 = 40\%$$

To be able to find the labor force participation rate we must have the labor force and the population. This question does not provide us with the figure of the population making it so that we can't calculate the labor force participation rate.

6. Discouraged-worker effect means that an individual is eligible to work, to have a job and be employed but who is unemployed and has not even tried to look for a job in the last four weeks. These individuals have normally given up on trying to look for a job.

These individuals are discouraged from looking for a job, however, these people are not classified as 'unemployed', they're also excluded from the calculator of the unemployment rate. Having individuals under the discouraged-worker effect can lead people to believe that there are more people looking for a job, when in reality they aren't. This does not only affect the unemployment rate but can also bring down the labor force participation rate, and can have a negative effect on the gross domestic product.

7. Unemployment benefits are income that are temporary, which are given to individuals who are unemployed to help them through the process of finding a job. Europe pays their unemployed individuals higher end for a longer period of time, compared to the US which doesn't. Europe's unemployment rate would more likely be higher and for a long period of time as they're providing unemployment individuals with more benefits for a longer period of time. This will not motivate them to go look for a job, as they've been compensated by the government without even having to work. This can lead them into a discouraged-worker effect. As they aren't motivated or feeling a push to look for a job with a stable income, as the government is paying them for a longer period of time while they're not doing any work.

The US in comparison isn't doing the same. This would lead them to have a lower unemployment rate as their citizens are in fear that their unemployment benefits won't last long and give them a push to look for a job in order to survive. Personally, I feel that structural unemployment may get affected directly the most. As individuals who lose their job under this unemployment, which is because their job position is no longer in existence, for example newspaper workers, due to the modern technology physical copies of newspaper aren't needed. So those who've lost their job due to that go unemployed. As the government is providing them with benefits it might not give them the motivation to go look for a job in a completely different industry which will require different skills or experience. They may go into the discouraged-worker effect as they're getting paid and it's not motivating them to go out and look for jobs in a different industry as their previous jobs didn't need them anymore.

8. Inflation means that there is a rise in the price, which would lead there to being a decrease in the value of a currency's purchasing power. Purchasing power is the financial ability individuals have in order to buy goods and services. This is important because purchasing power has a very high impact on almost all aspect of the economy, this means from the investors to the individuals who buy goods, the prices of stocks. Inflation would decrease the value of purchasing power meaning that there would be a decrease in the goods and services one is able to purchase. Inflation is bad for purchasing power because it has a negative effects on our economy, by rising costs of goods and services, combine that with our current living standard, and also there being an increase in the interest rates in not only one market but in the global market, all this can lead there to become an economic crisis. This is why inflation reduces one's purchasing power and it's seen as a negative thing sometimes due to it's complications.

Inflation can have it's advantages and disadvantages to certain situations. For example, inflation can be a good thing for debtors. But if you're the creditor inflation isn't a good thing for you. However, having high inflation can cause problems for some. For example, if you have an individual who saves their money for when they plan to retire. Having high inflation can make it so that that money saved will not be as valuable as they planned for it to be due to inflation. Another example is that the interest rates on things will be increased, and also an increased in taxes.

9. Unanticipated deflation occurs when the expected inflation is not met, it's in reality lower sometimes even in the negatives. The creditor benefits from this, and the debtor suffers. For example, the banking systems, nominal debt, and the aggregate economy all take a heavy hit by an anticipated deflation. As the prices of everything are not increasing but decreasing, and decreasing at a level they did not expect. An example of this would be, if a new smartphone becomes highly popular in the market, other companies and manufacturers start to make smartphones very similar to the original one. Now we've got smartphones in the same type, and they aren't selling quickly enough, so the price of the smartphone drops in order to be able to sell the smartphones. However, there might be certain companies that can't sell their inventory of the smartphones, and in order to make cuts in their costs, they let go of some of their employees. These unemployed individuals don't have enough money to buy goods and services, continuing the trend. This can lead to a recession or even a depression, central banks try their best to try and stop deflation as soon as possible.

10. Interest rate means the price of borrowing money, it's the risk's the creditor takes by lending their money to an individuals. The economy encourages both creditors and debtors to do so, as this helps the economy as people are borrowing, lending and spending money. However, there is no fixed type of interest rate, it changes depending on the loans. Central banks tend to make their interest higher if inflation occurs. Creditors tend to make their interest rates higher as to compensate for there being a decrease in purchasing power due to inflation. The Fisher equation is an ~~idea~~ idea that explains the relationship between inflation and real and nominal interest rate under inflation. The Fisher equation is used to decide the amount one would charge on the interest rate. Banks need to set a high nominal interest rate during the time of inflation, if they don't this will affect real interest in a negative way, resulting in no one depositing money in the bank. The Fisher equation is important to central banks to use during times of inflation as central banks will use the Fisher equation to calculate the amount of increase they need to make on the interest rates during times of inflation.

11. Fisher equation ($i = \text{real} + \text{inflation rate}$)

$$i = 30 - 25 = 5$$

Real interest rate is ~~500~~ 5%

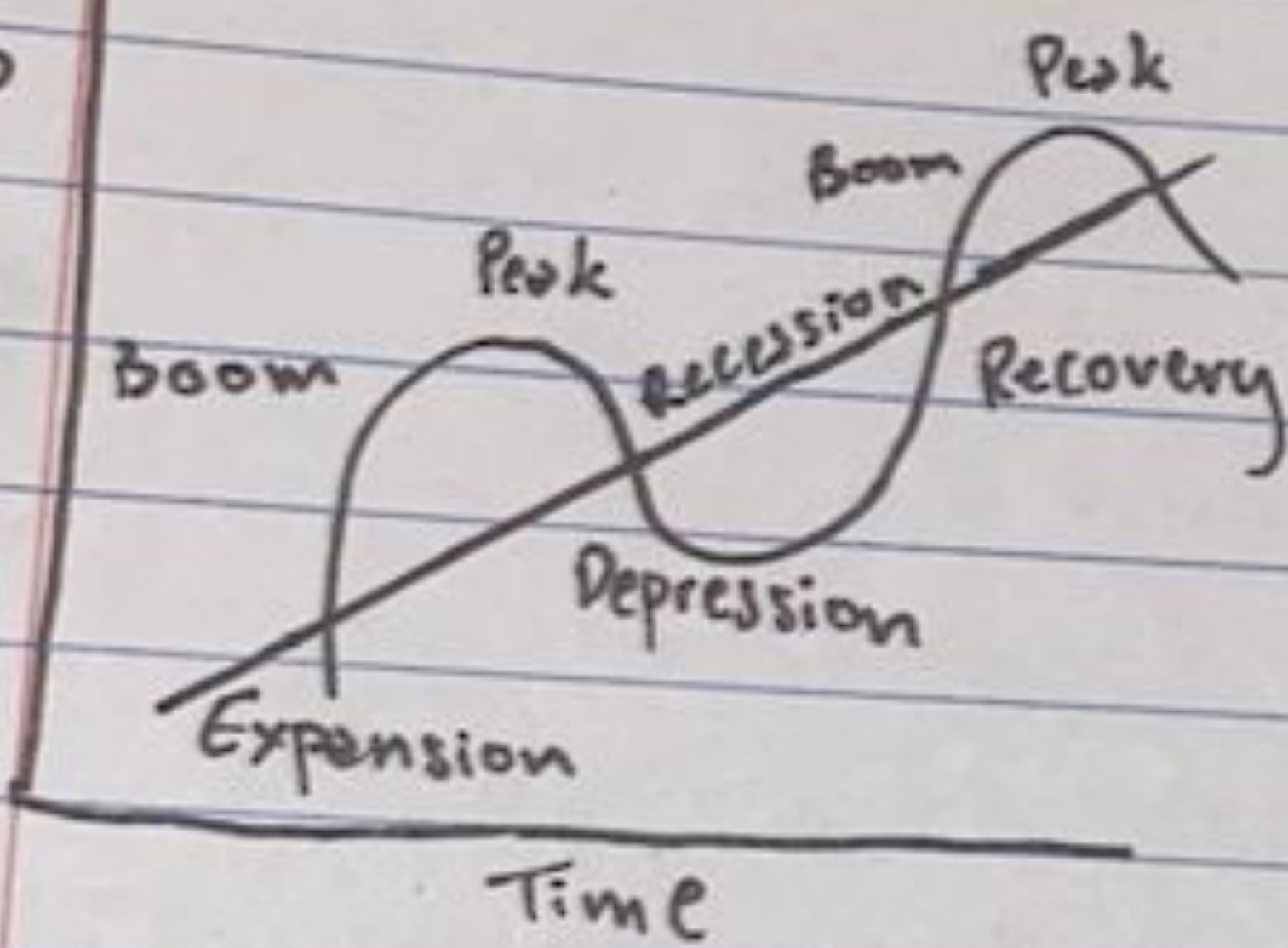
= 5%,

12. Inflation is needed in certain times to help the economy but at a moderate level. Having a slight inflation allows our economy to grow as well. By having the prices rise slightly, consumers think that the prices of goods and services will increase even more in the future so they tend to buy right away, afraid of the price increasing even more, this helps the economy as the demands in the economy increases, however this is only short-term. However, the increase in demand means that there will be an increase in employees needed by manufacturers. This is done as the manufacturers are trying to meet the increase in demand. This will then help with the growth in the economy. Money supply is also very important to the growth of the economy. Money supply is a country's currency and all forms of money whether that be cash or in any other form. As if there is an increase in money supply the interest rate will decrease, giving consumers more money to spend. This will then give businesses more reasons to order materials for production. This will bring an increase in demand which would mean that businesses will need to hire more workers. This will grow the economy. Money supply also has a relationship with inflation, they can help each other to help grow the economy. Also, deflation. Having inflation removes the threat of deflation, as deflation can lead the economy into a recession or depression. But not only that when an economy faces deflation, the demand by consumers drops as ~~the~~ consumers are willing to wait to see if the price will drop even lower. Due to the drop in demand companies will let go of their workers making the unemployment rate go up, this will make the economy a wage deflation.

13. The two administrations are menu costs and shoe leather costs. Menu cost is the cost a business faces when they change the price of a good or service. If the economy goes into inflation businesses must increase the prices of their goods. The second administrative cost in inflation is shoe leather costs. This refers to the labor, the time and energy individuals put into fighting against the effects of inflation, such as having less cash in hand and maybe even dealing with central banks.

14

Real GDP



- a. The expansion phase
- b. The ~~deep~~ depression phase
- c. The expansion phase, in order to help businesses invest and consumer to spend money to help the economy
↳ Example, 2008 financial crisis
- d. The depression phase, in order to help the country produce more GDP this is to decrease the demands
↳ Example: Increasing taxes, and lowering government spending.

e. The trend line is used by trader and investors to see the flow of there good is doing and if it'll make any profit. The four main factors the effect the trendline is international transactions, the government, supply and demand, lastly speculation and the expectations set for it.

15.

This is possible and that's because both capital stock and labor force, and the state's real output increase all bring the same result together. Which is an increase in the entire state's gross domestic profit. There will be more being generated due to the increase in production from the increase in labor force, and also an increase in inventory from goods and services through the capital stock. There is more capital being generated through the state which is why it's possible for the the annual rate to be 7% and the real output being 11%. As there is an increase happening from capital stock, and labor force which would make the real output increase in growth.