Review questions: essay sample

Intermediate Economics

Chapter 13

Q1. Explain the two theories of aggregate supply. On what market imperfection does each theory rely? What do the theories have in common?

Answer: The two theories of aggregate supply are explained as follows.

Sticky price model: The model suggests that firms do not immediately change the prices in response to the change in market demand. The prices are also set by agreements between firms and customers. The market imperfection is that prices usually in goods market do not regulate with changes in demand. Sometimes even with the fall in demand, some firms reduce output rather than the prices.

Imperfect information model: This model assumes that prices adjust freely in order to balance demand and supply. Some producers often confuse changes in prices with changes in relative prices. Even with the price rise of goods, producers attach the rise to increase in relative prices but which is merely the rise in general price level in the market. This leads to producers producing higher output.

The similarity in both the model is the confusion regarding what is actually happening in the market and what producers believe is happening. In the former model, firms believe the prices to change with demand and it does not. In the latter model, firms expect relative prices have changed but it does not in reality.

Q2. How is the Phillips curve related to aggregate supply curve?

Answers: The aggregate supply suggests the relationship between output and prices but it can also reflect the link between output and inflation. The Philips curve and short run aggregate supply shows the similar idea. Both the theories show the relationship between real and nominal variable in the short run. Relating to Okun's law that is 2% output decreases with every 1% increase in unemployment of natural rate, we get the Philips curve which shows the relationship of inflation and unemployment rate.

Q4. Explain the difference between demand-pull inflation and cost-push inflation?

Answer: Cost-push inflation refers to the supply shocks due to increase in the cost of production creating reduction in supply and increase in prices. For example, rise in oil prices.

Demand-pull inflation refers to the pressure exerted due to cyclical unemployment. The low rate of unemployment pulls the inflation rate up which means demand-pull inflation. This inflation is due to pressure on aggregate demand. Higher the unemployment leads to decrement in the inflation rate.

Problem and application:

Q1. In the sticky-price model, describe the aggregate supply curve in the following special cases. How do these cases compare to the short-run aggregate supply curve we discussed in chapter 9.

Answer:

No firms have flexible prices, (s = 1).

In the sticky price model, there are generally two types of firms. Firstly, few firms (s) have sticky prices. Secondly, others (1-s) have flexible prices. The price level is denoted by the given equation:

P= sE+ (1-s)a(Y-Y)

Thus, the overall price level depends on expected level of price and output.

If the firms do not have flexible prices, then s= 1 and 1-s will be equal to zero creating (1-s) [a(Y-Y)] equivalent to zero. This creates P = EP. This suggests aggregate supply curve to be horizontal since price level is fixed at the expected level of price.

The desired price does not depend on aggregate output, a = 0.

If the firms have flexible prices, the equation follows as P = EP + (1-s) [a(Y-Y)]. This means P is equivalent to EP + ∞ and Y = Y. In this case, the curve will be vertical.

Q3. According to the rational-expectations approach, if everyone believes that policy makers are committed to reducing inflation, the cost of reducing inflation -the sacrifice ratio -will be lower than if the public is skeptical about the policy makers' intentions.

Why might this be true? How might credibility be achieved?

Answer: The approach believes that the cost associated with reducing inflation derives from changing the expectation of people. The change in expectation without additional cost, leads to decrement in inflation in a costless manner. The Phillips equation tells us that:

Inflation = expected inflation + β x cyclical unemployment + supply stock

If the government brings the inflation to a desired level, the unemployment will not rise over the natural rate. According to the approach, the people utilize all the information available to form the expectation about the inflation rates. If the people believe that government is working to reduce inflation, then the expected level of inflation will drastically fall. The inflation will fall with minimum cost to the economy and the sacrifice ratio will be low.

If the people do not realize the commitment of the government to reduce the inflation, the inflation will not be reduced. So, according to the rational-expectations approach, the cost to reduce the inflation is based on the credibility of the government.

Q7. Some economists believe that taxes have an important effect on labor supply. They argue that higher taxes cause people to want to work less and that lower taxes cause them to want to work more. Consider how this effect alters the macroeconomic analysis of tax changes.

If this view is correct, how does a tax cut affect the natural rate of outputs?

The natural level of output has the production function as follows:

Y= F (K, L)

This suggests the function of Labor (L) and Capital (K). The tax cut raises the employment level this will raise the level of L, and therefore leading to higher level of output.

How does a tax cut affect the aggregate demand curve? The long-run aggregate supply curve? The short run aggregate supply?

The tax cut leads to higher disposable income of the people. This increases the consumption level shifting Ad towards the right. The long run aggregate supply also shifts outward due to rise in output. However, the short run aggregate supply changes with respect to the model. In case of labor supply, it shifts outward as labor is willing to work more at existing wage. In case of sticky-wages model, the short run aggregate supply does not move. In case of imperfect information model, labor market is always in equilibrium. So, the higher supply of labor creates more employment and shifts the curve outward.

What is the short run impact of a tax cut on output and the price level? How does your answer differ from the case without the labor supply effect?

In terms of the sticky price model, the AD curve shifts to AD2 as shown in the figure. This leads the increase in price and output. In case of SRAS, it is unchanged. The equilibrium is at SW according to this model. But in case of imperfect information model, SRAS also shifts which suggests it is more expansionary rather than inflationary. The equilibrium is at the point II.

What is the long run impact of tax cut on output and the price level? How does your answer differ from the case without the labor supply effect?

The tax cut creates a higher long run output due to increase in labor supply. The effect on long run is not certain whether SRAS will shift or not. The change in long run equilibrium as shown in the figure suggests decrease in price and increase in output.

Q9. The table below shows the changes in inflation rate for the last five

years, as reported in Statistic Canada http://www5. statcan. gc. ca/cansim/a47

The table suggests the inflation rate was the lowest in the year 2008 and 2009 after the recession while it started to increase again to 1. 8 and 2. 9 in 2010 and 2011.

The CPI excludes the food and energy, which also follows a similar trend to that of CPI of all the items. In 2009, CPI excluding food and energy was higher than all items CPI. However, both the measure provided same inflation rate in 2013.

Chapter 15:

Questions for review:

Q1. What are the inside lag and the outside lag? Which has the longer inside lag-monetary or fiscal policy? Which has the longer outside lag? Why?

Answer: Inside lag refers to the time of shock in the economy and policy responding towards that shock. The lag arises due to the time lapse in recognizing the shock by the policy makers and enforcing the appropriate policies. The outside lag refers to the time taken for the policy to affect the economy. This lag arises due to the time taken for expenditure, income and employment to respond to the changes in policy.

In case of fiscal policy, it has inside lag since the changes in spending or taxes require approval, which takes much time. There also occurs a discrepancy between the views of federal and provincial government.

In case of monetary policy, it has outside lag since the increase in money supply through lowering interest rates, enhances investment. But, investment decisions are made in advance. So, the effect shows up after

relative time period in real GDP.

Q2. Why would more accurate economic forecasting make it easier for policy makers to stabilize the economy? Describe two ways economists try to forecast developments in the economy.

Answer: The economists attempt to forecast the development through the leading indicators. This includes 10 data series such as stock prices, the money supply, the value of orders, etc.

The other ways used by economists are the models of the economy. There are several models developed via computers, which represent parts of the economy. Once the exogenous variable is decided like taxation, government spending, money supply, etc and then the model predicts about various endogenous variables like unemployment rates, output level, inflation, etc.

Q5. What is meant by the " time inconsistency" of economic policy? Why might policymakers be tempted to renege on an announcement they made earlier? In this situation, what is the advantage of a policy rule?

Answer: It is a case of rulers over discretion due to the time inconsistency of policy. The policymakers want to make the announcement regarding future polices to affect the decisions of private bodies. Although the private decision makers act on their expectations, the policy makers will want to renege on the announcement made earlier. Since the policy makers are inconsistent over time for their announcement, private decision makers distrust the announcement. To maintain their credibility, policy makers make fixed policy rule.

Problems and applications:

Q2. When cities pass laws limiting the rent landlords can charge on apartments, the laws usually apply to existing buildings and exempt any buildings not yet built. Advocates of rent control argue that this expectation ensures that rent control does not discourage the construction of new housing. Evaluate this argument in light of the time-inconsistency problem. Answer: When the new buildings are excused from the rent control law, it also creates a time inconsistency problem. The landlords believe to get higher rent from the new housing. But, the city also is able to take back the promise of not extending the rent control to new housing. In this case, many renters gain along with losses of few landlords. So, the landlords might assume the state to take back the promise and do not build new buildings.

Q3. The cyclically adjusted budget deficit is the budget deficit corrected for the effects of business cycle. In other words, it is the budget deficit that the government would be running in unemployment were at the natural rate. Some economists have proposed the rule that the cyclically adjusted budget deficit always be balanced-budget rule. Which is preferable? What problems do you see with the rule requiring a balanced adjusted budget?

Answer: The cyclically adjusted budget deficit refers to the level of excess of spending over revenue if GDP was at natural value. For example, in 1994 the federal government had a deficit of $40 billion in 2008-2009 while the cyclically adjusted deficit was assumed to be $25 million. This suggests the excess deficit of $15 million came from the effect of the economy with high unemployment rate. It was likely to disappear after the economy returns to the natural rate. Any additional measure to reduce it will create greater

recession. This will also increase national debt and the wait to automatic elimination of the portion of deficit will occur.