SØK1151 H2021. Assessment guidance.

Question 1 (weight 50%)

A commentator argues that an exogeneous increase in private saving will have a positive effect on economic growth both in the short and long run. Discuss this argument.

Students should explain how they understand short and long run. Relevant to define the short run as a situation where output is determined by aggregate demand. Thus, in short run, the interesting issue is what happens with aggregate demand as private saving increase. In contrast, the long run can be interpreted as a situation with full capacity utilization. Thus, in long run the interesting issue is what happens with production capacity, i.e the production side in the economy.

Short run effect

Students could use and explain a standard closed economy Keynesian or IS-LM model (ch. 3-5 in textbook) to study the short run effect of an increase in private saving on output. A savings increase can be interpreted as a negative shift in consumption for all levels of income, or a decrease in the marginal propensity to consume (this is easy to illustrate if a linear consumption function is presented). Both interpretations may be used. In both cases, the result will be a fall in output or a fall in output growth due to the fall in aggregate demand induced by the increase in saving. Students should explain the mechanisms at work, including the multiplier effect.

Long run effect

Students could establish and explain a standard economic growth model (ch.11-14 in textbook) with a constant returns to scale production function and a simple savings function. Using the model they should explain that an increase in the savings rate may generate temporary growth (or increase in growth) in output as the economy moves from one steady state to another. They should explain that the growth (or growth increase) will stop as the economy reaches the new long run equilibrium (steady state) where output growth is zero (in a model without technical progress) or equal to the growth rate in technology (in a model with technical progress).

Question 2 (weight 50%)

Suppose imports in a large country outside Europe fall. Discuss the effect of this fall on GDP, unemployment and net exports in a small European country that has the large country outside Europe as its main trading partner.

Suppose the policymakers in the small European country conduct a combination of expansive fiscal and monetary policies to leave GDP unchanged after the shock described above.

Discuss the effect of this policy mix on the components of GDP if

i) **The small country is not a member of the European Monetary Union and has its own currency**

_ii_)The small country is a member of the European Monetary Union and has Euro as its currency

First part: The students should explain and use a ISLM/UIP model for an open economy (ch. 20 in textbook) with flexible exchange rates. They can interpret the fall in imports in the large country outside Europe as a fall in the activity level abroad, i.e. a fall in Y^* in the notation used in textbook. The first order effect is a fall in net exports as Y^* falls. The fall in Y^* generates a leftward shift in the IS curve and output and the activity level decrease for given policy interest rate and fiscal policies. Unemployment increases accordingly. They should explain the mechanisms and the multiplier effects that is behind the leftward shift in the IS curve. They should also explain that the effect on net exports is negative despite the fall in Y that partially decrease imports, see for example p.410-411 in textbook.

Second part:

The students can interpret the situation as a policy mix that makes Y unchanged after the initial reduction in Y^* that shifted the IS curve to the left. Explanation of the mechanisms is important.

i)Flexible exchange rates

The effects of fiscal and monetary policy is discussed in a flexible exchange regime in chapter 20.4 in textbook.

Partially, the expansionary fiscal policy, for example in terms of an increase in government spending G shifts the IS curve to the right. This policy increase aggregate demand, but at a cost of a further decrease in net export since imports increase. Mechanisms should be explained.

The expansionary monetary policy partially shifts the horizontal LM curve downwards, which partially increase investment and dampens the reduction in net exports through the exchange rate depreciation. Thus, a combination of the rightward shift in IS and the downward shift in the LM curve might restore Y at the level seen before the reduction in Y^*. In a new equilibrium with unchanged Y, we have an increase in G, increased I and a reduction in net exports as well as a budget deficit (if G=T initially).

ii)Euro membership should be interpreted as a system with fixed exchange rates and the students should explain that this implies a domestic interest rate equal to the outside rate, $i=i^*$.

In this case, the only policy option is to use expansive fiscal policy (for example by increased government spending, G) to neutralize the fall in Y due to the fall in Y^*. Since the interest rate cannot be changed, a large increase in G and a corresponding large budget deficit (if T=G initially) is required to increase the aggregate demand sufficiently to counteract the initial negative shift in the IS curve due to the reduction in Y^*. The new equilibrium is characterized by an increase in G and a reduction in net exports as well as a huge budget deficit (if G=T initially).