Part I, Paper 2: Macroeconomic Principles II

Supervision 1

The short-run model: Keynesian Cross and introduction to IS-LM/MP

Short questions

1. Explain briefly how you would expect the following to affect the position and slope of the IS curve:
   (a) Increased consumer confidence
   (b) A cut in the headline rate of income tax
   (c) A banking crisis that affects the availability of business credit

2. Does it matter whether central banks fix the money supply or the nominal interest rate?

Long questions

1. [Tripos 2013] Consider a closed economy with no government, in which consumption demand C is described by the function:

$$C = c_0 + c_1 Y$$

   where Y is income and $c_0 > 0$, $c_1 \in (0, 1)$ are constants. Suppose that there is an increase in the autonomous consumption demand of the agents, c_0.

   (a) What is the long run effect of such a shift in private consumption demand on income, savings and investment?
   (b) How would your answer for part (a) change if you considered the short run effects of the same shift on income, savings and investment?
   (c) Compare your answers for parts (a) and (b) and explain where the differences originate from.

2. [Tripos 2013] A closed economy with a fixed price level and zero income tax rate is in a deep recession and its public debt is very high. The government considers three different stimulus packages to help the economy out of the recession. All three packages involve spending public funds, G , but they differ in the way the funds are raised. The three packages are:

   P1 The increase in G is financed by increasing taxes, T.

   P2 The increase in G is financed by selling government bonds to the private sector.

P3 The increase in G is financed by selling government bonds to the central bank.

(a) Explain carefully how each package affects GDP, denoted by Y, in the short run, and compare and contrast the effects.

(b) Suppose that planned consumption, C, is

$$C = c_0 + c_1 (Y - T)$$

where $c_0 > 0$, $c_1 \in (0, 1)$. Planned investment (I) is:

$$I = a + b (T - G)$$

where a and b are positive constants.

i. Provide an interpretation of the planned investment function and derive mathematically the government spending multiplier associated with the three packages.

ii. Which package would be most effective in stimulating the economy? Is it possible that a fiscal contraction can be expansionary? Explain carefully.