

SUPERVISION 3*The AS-AD model; the classical open-economy model***Short questions**

1. From January 2016 to January 2017 the inflation rate in the United States was 2.5%, while during the same period the inflation rate in the United Kingdom was 1.8%. Assuming purchasing power parity, will the UK Pound have appreciated or depreciated against the US Dollar, and by how much approximately?
2. [Tripos 2009] In the context of the classical model, what is the effect of an increase in government spending on the real interest rate and investment demand in (a) a closed, and (b) a small open economy?

Long questions

1. Using aggregate supply/aggregate demand analysis, explain the likely consequences of the following for real GDP and inflation in a closed economy:
 - (a) An earthquake destroys a large proportion of the capital stock
 - (b) VAT is increased from 20 per cent to 25 per cent
 - (c) The central bank decides to target a higher rate of inflation
2. Consider a small open economy with flexible prices and no government, in which the components of aggregate expenditure satisfy the following relationships

$$\begin{aligned}
 Y &= \bar{Y} = 1000 \\
 C &= 100 + 0.6Y \\
 I &= 400 - 50r \\
 NX &= 200(1 - \varepsilon)
 \end{aligned}$$

r here is the domestic real interest rate, and ε is the real exchange rate (defined as the relative price of home goods in terms of foreign goods). Capital is imperfectly mobile, with the domestic real interest rate satisfying the following relationship with the world real interest rate, r^w :

$$r = r^w - 0.04NX + \theta \quad (1)$$

- (a) Provide a brief interpretation of the two final terms on the right-hand side of expression (1)
- (b) Suppose $r^w = 2$ and $\theta = 0$. Solve for the equilibrium values of r , ε , I and NX

- (c) Now suppose there is an increase in θ , so that $\theta = 2$. What are the new equilibrium values for r , ε , I and NX ?
- (d) The country in question is pegging its nominal exchange rate to the value of a foreign currency. Assuming that the foreign price level remains constant, how does the domestic price level change as θ increases?
- (e) How would net capital flows change in response to higher θ ? Comment briefly on whether you find this a plausible model of ‘capital flight’.