Макроэкономика 1 — МИЭФ, 2021 midterm

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SECTION 1

A. Multiple-choice questions

1

In an open economy the following variables are known: private consumption $= 80$; private saving $= 30$; net taxation $= 40$; net investment $= 20$; exports $= 20$.

- (a) If government spending $= 30$ and the trade deficit $= 20$, the goods market is in equilibrium.
- (b) If government spending $= 30$ and the trade deficit $= 20$, there is excess demand in the goods market.
- (c) If the trade deficit $= 0$ and the budget deficit $= 0$, the goods market is in equilibrium.
- (d) If imports $= 10$ and government spending $= 50$, there is excess demand in the goods market.

2

Consider the $IS - MP$ model for a closed economy. The central bank pursues output stabilisation and commits to increase the interest rate when output exceeds its target. A fiscal expansion shifts the IS schedule to the right and creates crowding out, which can be illustrated as:

- (a) a movement along the new IS schedule;
- (b) a slight backward shift of the new IS schedule;
- (c) a complete leftward shift of the IS schedule back to its initial position;
- (d) a movement along the old IS schedule.

3

In a closed economy, profits constitute a share α of national income Y and are fully reinvested. A proportional tax t is levied on labour income and adjusts to balance the budget, while government spending G_0 is exogenous. Let c_1 be the marginal propensity to consume out of disposable labour income. What is the balanced-budget government-spending multiplier $\partial Y / \partial G_0$?

- (a) 1
- (b) $\frac{1}{1 - c_1 - \alpha}$
- (c) $\frac{1}{1 - [c_1(1 - t) + \alpha + t]}$
- (d) $\frac{1}{1 - \alpha}$

4

In an open economy with perfect capital mobility and a fixed exchange rate, the government plans expansionary fiscal policy financed by borrowing from the public. Because the private sector does not buy the bonds, the central bank purchases all newly issued government debt. How does central-bank financing change the short-run output effect compared with borrowing from the public?

- (a) The same positive effect
- (b) No effect in either case
- (c) A greater positive effect
- (d) A smaller positive effect

5

A country with a fixed exchange rate has a large coffee-addicted population, making import demand for coffee almost inelastic. Global overproduction of coffee causes which short-run effects in this small economy’s foreign-exchange market?

- (a) Higher demand for foreign currency and a higher supply of liquid assets
- (b) Higher demand for foreign currency and a lower supply of liquid assets
- (c) Lower demand for foreign currency and a lower supply of liquid assets
- (d) Lower demand for foreign currency and a higher supply of liquid assets

SECTION 2

C. Problem

Consider a small open demand-deficient economy with fixed prices and wages. Consumption, investment and net exports are linear. Initially, the marginal propensity to import equals the marginal propensity to invest. The central bank targets the money supply.

(a) (10 marks) Set up the model and derive the balanced-budget autonomous-expenditure multiplier under lump-sum net taxes. Explain the multiplier effect intuitively.

(b) (10 marks) What is the fiscal stance, and how is it related to the budget deficit? List and compare the sources of budget-deficit financing in open and closed economies.

For (c) and (d), consider a small open economy under sanctions that prohibit all cross-border financial-capital movements. After pandemic restrictions are relaxed, the rest of the world opens its borders to international tourists.

(c) (10 marks) Assume a flexible exchange rate. Illustrate the initial equilibria in the goods, money and foreign-exchange markets in the $IS - LM - BP$ diagram. Show the short-run effects of more wealthy local citizens travelling abroad. Mark the new interest rate and output. Label all schedules and briefly explain the foreign-exchange-market adjustment.

(d) (10 marks) Assume instead that the central bank fixes the exchange rate. How does the answer to (c) change? What happens to consumption, domestic investment and net exports?

Now use the initial short-run equilibrium from (c) as the starting point. Instead of opening borders for tourists, suppose all capital-mobility restrictions are removed.

(e) (10 marks) Evaluate the short-run effects of abolishing capital controls and illustrate them in the $IS - LM - BP$ diagram. Describe the adjustment mechanisms under fixed and flexible exchange rates.

Continue to assume perfect capital mobility.

(f) (10 marks) Take the fixed- and flexible-rate equilibria from (e) as starting points. Do they change in the long run when prices and wages are fully flexible? Describe the adjustment mechanisms and illustrate them in the $IS - LM - BP$ diagram.