

3. Assume that Nepal is in long-run macroeconomic equilibrium and has an open economy.
- A. Draw a correctly labeled graph of the aggregate demand, short-run aggregate supply, and long-run aggregate supply curves for Nepal, and show each of the following.
- The current equilibrium real output and price level, labeled Y_1 and PL_1 , respectively
 - The full-employment output, labeled Y_F
- B. Nepal and Thailand are trading partners. Assume that Thailand experiences an increase in real income. On your graph in part A, show the short-run effect of the increase in real income in Thailand on real output and the price level in Nepal, labeling the new short-run equilibrium real output Y_2 and the new short-run equilibrium price level PL_2 .
- C. Assume that at the short-run equilibrium shown on your graph in part B, Nepal is experiencing a 400 million rupee output gap. Policymakers in Nepal want to use discretionary fiscal policy to return the economy to full employment, and the marginal propensity to consume is 0.75. Calculate the minimum change and state the direction of change in government spending required to completely close the output gap in the short run. Show your work.
- D. Assume instead that no discretionary policy actions are taken. Explain how automatic stabilizers in the short run would reduce the effect of the change in real output shown on your graph in part B.

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END OF EXAM

1. The economy of Northland is in short-run equilibrium with an actual unemployment rate of 7% and an actual inflation rate of 1%. The natural unemployment rate in Northland is 5%.
- (a) Using the relevant numerical values given, draw a correctly labeled graph of the short-run and long-run Phillips curves. Label the current short-run equilibrium point as X. Plot the relevant numerical values provided on the graph.
- (b) Is the expected inflation rate greater than, less than, or equal to 1% ? Explain.
- (c) Assume the marginal propensity to consume is 0.9.
- (i) If the government decreases income taxes by \$20 billion, calculate the maximum change in aggregate demand. Show your work.
 - (ii) If instead the government increases spending by \$20 billion, calculate the maximum change in aggregate demand. Show your work.
- (d) On your graph in part (a), show a possible new short-run equilibrium point labeled Z that would result if the government increases spending and there is no change in inflationary expectations.
- (e) How would an increase in unemployment compensation affect aggregate demand in the short run? Explain.
- (f) Assume instead the government takes none of the preceding policy actions. (Northland is still in short-run equilibrium; the actual unemployment rate is 7%, the actual inflation rate is 1%, and the natural unemployment rate is 5%.) What will happen to each of the following in the long run?
- (i) The short-run aggregate supply curve. Explain.
 - (ii) The short-run Phillips curve
 - (iii) The actual unemployment rate

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

3. The government budget of the country of Geeland is currently balanced. The government budget is composed of tax revenues (T), transfer payments (TR), and government spending (G).
- (a) Assume the economy moves into a recession and there is no discretionary policy action.
- (i) Will the government budget move into a deficit or a surplus in the short run? Explain using the appropriate components of the government budget identified above.
 - (ii) Based on your answer to part (a)(i), what will happen to the government debt?
- (b) Based on your answer to part (a)(i), identify one specific fiscal policy action that will balance the budget.
- (c) How will the fiscal policy action from part (b) affect the actual unemployment rate in the short run? Explain.
- (d) Did the government efforts to maintain a balanced budget make Geeland's recession more severe or less severe in the short run? Explain.

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END OF EXAM