2. Assume the economy of Jenland is in short-run equilibrium at a real output level above full-employment real output.

A. The banking system in Jenland has ample reserves. Identify a specific monetary policy action that the central bank of Jenland would implement to return the economy to full employment in the short run.

B. Draw a correctly labeled graph of the reserve market for Jenland, and show the effect of the central bank's action identified in part A on the policy rate.

C. Based on the change in the interest rate shown on your graph in part B, will each of the following increase, decrease, or remain the same in Jenland in the short run?

i. The price of previously issued bonds

ii. The price level. Explain.

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2. Assume that commercial banks must hold a minimum of 20% of their deposits as reserves. Now suppose that the central bank of the country sells $100,000 of government bonds to commercial banks.

(a) Calculate the maximum change and state the direction of change in the money supply as a result of the central bank bond sale. Show your work.

(b) Draw a correctly labeled graph of the money market and show the effect of the change in the money supply identified in part (a) on the nominal interest rate.

(c) Given the change in the money supply in part (a), if the velocity of money is constant, what will happen to the nominal gross domestic product? Explain.

(d) Based on the change in the nominal gross domestic product in part (c), what happens to the price level if the real gross domestic product is constant?

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1. Assume Smithland is in short-run equilibrium at a level of output that exceeds the full-employment level of output.

(a) Draw a correctly labeled graph of the aggregate demand, short-run aggregate supply, and long-run aggregate supply curves, and show each of the following.

(i) The current equilibrium real output and price level, labeled Y_1 and PL_1, respectively
(ii) The full-employment output, labeled Y_F

(b) Assume Smithland's government cuts individual income taxes. On your graph in part (a), show the short-run effect of the tax cut on equilibrium real output, labeling the new short-run equilibrium real output Y_2.

(c) Based solely on the change in real output on your graph in part (b), what will happen to each of the following in the short run?

(i) The natural rate of unemployment
(ii) Nominal interest rates. Explain.

(d) Assume instead the central bank intervenes to correct an inflationary output gap. What open-market operation should the central bank take?

(e) Draw a correctly labeled graph of the money market, and show the effect of the open-market operation identified in part (d) on the nominal interest rate.

(f) Based solely on the interest rate change identified in part (e), what will happen to the international value of Smithland's currency in the foreign exchange market? Explain.

(g) Based solely on the exchange rate change identified in part (f), will Smithland's imports increase, decrease, or remain the same? Explain.

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