

Past-paper walk-through

Changes in the Foreign Exchange Market and Net Exports ■ 6.5

eXercise

Questions in this set

- 2025 Set 1 Q1
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Reading the mark scheme

- **B1** a mark that stands on its own – the point is either made or not.
- **M1** a *method* mark: the right approach, even if the number is wrong.
- **A1** an *answer* mark, and it usually needs its M mark first.
- **C1** a working mark on the way to the answer.
- **//** separates answers the examiner accepts equally.
- **ecf** = error carried forward: a later part is marked on your own earlier answer.
- **owtte** = “or words to that effect” – the wording need not match.

Question 1

2025 Set 1 ■ Q1

Assume that the economy of Vortania is in long-run equilibrium.

(a) Draw a correctly labeled graph of the short-run and long-run Phillips curves for the economy of Vortania, and label the long-run equilibrium point as P.

Question 1

2025 Set 1 ■ Q1

Assume that the economy of Vortania is in long-run equilibrium.

(b) Assume that new residential construction projects are being implemented in Vortania.

(b)(i) Will real output in Vortania increase, decrease, or remain the same in the short run? Explain.

(b)(ii) Assuming no change in inflationary expectations, on your graph in part A, show the short-run effect of the new residential construction projects on Vortania's economy, labeling the new short-run equilibrium point as S.

Question 1

2025 Set 1 ■ Q1

Assume that the economy of Vortania is in long-run equilibrium.

(c) Vortania and Rhodara are trading partners with flexible exchange rates. The currency of Vortania is the Vortanian crown (VTC), and the currency of Rhodara is the Rhodaran mark (RHM). Assume that Vortania's capital and financial account (CFA) balance is zero. Now assume that Vortania imposes new tariffs on imports from Rhodara. Draw a correctly labeled graph of the foreign exchange market for the Vortanian crown, and show the effect of the tariffs on the SUPPLY of the Vortanian crown and the international value of the Vortanian crown.

Question 1

2025 Set 1 ■ Q1

Assume that the economy of Vortania is in long-run equilibrium.

(d) Based solely on the change in the international value of the Vortanian crown shown in part C, will Vortania's net exports increase, decrease, or remain the same in the short run?

Question 1

2025 Set 1 ■ Q1

Assume that the economy of Vortania is in long-run equilibrium.

(e) Based on the change in net exports identified in part D, what will happen to each of the following in the short run?

(e)(i) The capital and financial account (CFA) balance in Vortania. Explain.

(e)(ii) Employment in Vortania

Question 1

2025 Set 1 ■ Q1

Assume that the economy of Vortania is in long-run equilibrium.

(f) Assume the central bank of Vortania wants to return the Vortanian crown to its international value before the imposition of the tariffs. Would the central bank buy or sell Vortanian crowns in the foreign exchange market? Explain.

Solution 1

(a)

Mark scheme

- Draw a downward-sloping short-run Phillips curve (SRPC) with Inflation Rate (%) on the vertical axis and Unemployment Rate (%) on the horizontal axis (1 point). Then add a vertical long-run Phillips curve (LRPC) at the natural rate of unemployment U_N , and label the point where the SRPC crosses the LRPC as P (1 point). 2 points total.

Solution 1

(b)

Mark scheme

- This line is only the stem introducing part B ('Assume that new residential construction projects are being implemented in Vortania'); it states an assumption and has no separately scorable content of its own. Both points for part B are earned under B(i) and B(ii).

Solution 1

(b)(i)

Mark scheme

- Real output will INCREASE in the short run. New residential construction projects raise investment spending (a component of aggregate demand), which increases aggregate demand and moves the economy along the SRPC to higher output. 1 point for stating 'increase' with this investment-spending explanation.

Solution 1

(b)(ii)

Mark scheme

- On the graph from part A, plot a new point S on the (unchanged) SRPC to the LEFT of point P — i.e., at lower unemployment and higher inflation than P. Because inflationary expectations are unchanged, the SRPC itself does not shift; the economy simply moves along the existing SRPC as aggregate demand rises. 1 point.

Solution 1

(c) Mark scheme

- Draw the foreign exchange market for the Vortanian crown (VTC): vertical axis = price of VTC in RHM/VTC, horizontal axis = Quantity of VTC, with a downward-sloping demand curve D_{VTC_1} and an upward-sloping supply curve S_{VTC_1} intersecting at exchange rate e_1 and quantity Q_1 (1 point). Then show that the tariffs on Rhodaran imports cause Vortanians to buy fewer Rhodaran goods, so they supply fewer crowns in the foreign exchange market: the supply curve shifts LEFT to S_{VTC_2} , raising the equilibrium exchange rate to $e_2 > e_1$ (an appreciation of the crown) and lowering the quantity traded to $Q_2 < Q_1$ (1 point). 2 points total.

Solution 1

(d)

Mark scheme

- Vortania's net exports will DECREASE. The crown appreciated (part C), making Vortanian exports more expensive to foreigners and Rhodaran imports cheaper to Vortanians, so exports fall and imports rise, decreasing net exports. 1 point.

Solution 1

(e)

Mark scheme

- This line is only the stem introducing part E ('Based on the change in net exports identified in part D, what will happen to each of the following in the short run?'); it has no separately scorable content of its own. Both points for part E are earned under E(i) and E(ii).

Solution 1

(e)(i)

Mark scheme

- The capital and financial account (CFA) balance in Vortania will move into SURPLUS. Because the current account (CA) moved into deficit (net exports fell, part D) and the balance of payments must balance ($CA + CFA = 0$), the CFA balance must move into surplus to offset the CA deficit. 1 point.

Solution 1

(e)(ii)

Mark scheme

- Employment in Vortania will DECREASE. The fall in net exports (part D) is a fall in a component of aggregate demand, so AD decreases, decreasing short-run real output and therefore employment. 1 point.

Solution 1

(f)

Mark scheme

- The central bank of Vortania would SELL Vortanian crowns in the foreign exchange market. Selling crowns increases the supply of VTC, which depreciates the crown back toward its pre-tariff international value, reversing the appreciation from part C. 1 point.

Question 3

2024 Set 1 ■ Q3

Assume Malaysia's economy is in a recession and its government currently has a balanced budget.

- (a)** Identify a specific fiscal policy action that the government of Malaysia would implement to address the recession.
- (b)** How will the fiscal policy action identified in part (a) affect the real interest rate in Malaysia? Explain.
- (c)** Malaysia and Japan are trading partners with flexible exchange rates. Malaysia's currency is the ringgit (MYR), and Japan's currency is the yen (JPY). Draw a correctly labeled graph of the foreign exchange market for the ringgit relative to the yen. Show the effect of the change in the real interest rate identified in part (b) on the international value of the ringgit.

Question 3

(d) As a result of the change in the value of the ringgit shown in part (c), will Malaysia's imports increase, decrease, or remain the same? Explain.

Solution 3

(a)

Mark scheme

- An expansionary fiscal policy action: an increase in government spending, a decrease in taxes, or an increase in transfer payments (any one of these).

Solution 3

(b)

Mark scheme

- The real interest rate will increase. Explanation: the fiscal policy action increases government borrowing, which increases the demand for loanable funds (or decreases the supply of loanable funds available to the private sector), raising the equilibrium real interest rate — the crowding-out effect.

Solution 3

(c) Mark scheme

- Draw the foreign exchange market for the ringgit: JPY/MYR (exchange rate) on the vertical axis, Quantity of MYR on the horizontal axis. Point 1: a downward-sloping demand curve D_MYR1 and an upward-sloping supply curve S_MYR1 intersecting at equilibrium exchange rate $e1$ and quantity $Q1$ — a correctly labeled graph. Point 2: show the effect of the higher Malaysian real interest rate from part (b) — higher returns on MYR-denominated assets increase the demand for the ringgit (D_MYR1 shifts right to D_MYR2) or decrease its supply (S_MYR1 shifts left to S_MYR2), raising the equilibrium exchange rate to $e2 > e1$, i.e., an appreciation of the ringgit.

Solution 3

(d)

Mark scheme

- Malaysia's imports will increase. Explanation: the appreciation of the ringgit makes Japanese (foreign) goods relatively less expensive in ringgit terms for Malaysian consumers, so Malaysia's imports rise.

Question 3

2024 Set 2 ■ Q3

Assume that Jamaica has a cyclical unemployment rate of 4% and a balanced capital and financial account (CFA).

- (a)** Identify a specific fiscal policy action that Jamaica's government would take to bring its economy to full employment.
- (b)** Based solely on the short-run change in real output resulting from the fiscal policy action identified in part (a), what will happen to Jamaica's net exports? Explain.
- (c)** Assume that Jamaica and Turkey are trading partners with flexible exchange rates. Jamaica's currency is the Jamaican dollar (JMD), and Turkey's currency is the lira (TRY). Draw a correctly labeled graph of the foreign exchange market for the Jamaican dollar relative to the lira, and show the effect of the change in net exports identified in part (b) on the supply of the Jamaican dollar and the international value of the Jamaican dollar.

Question 3

(d) How will the change in net exports identified in part (b) affect Jamaica's capital and financial account (CFA)? Explain.

Solution 3

(a)

Mark scheme

- An expansionary fiscal policy action: an increase in government spending, a decrease in taxes, or an increase in transfer payments (any one of these) would move Jamaica's economy to full employment.

Solution 3

(b)

Mark scheme

- Jamaica's net exports will decrease. Explanation: the expansionary fiscal policy raises Jamaica's short-run real output/income; higher real income increases Jamaican demand for internationally traded goods, raising imports, which (holding exports constant) causes net exports ($X - M$) to fall.

Solution 3

(c) Mark scheme

- Draw a foreign-exchange-market graph for the Jamaican dollar with the exchange rate (TRY/JMD) on the vertical axis and Quantity of JMD on the horizontal axis: a downward-sloping demand curve D_{JMD_1} and an upward-sloping supply curve S_{JMD_1} intersect at initial equilibrium exchange rate e_1 and quantity Q_1 (1 point for a correctly labeled graph). For the second point, shift the supply curve for JMD rightward, from S_{JMD_1} to S_{JMD_2} (the fall in net exports from part (b) means Jamaicans supply more JMD to buy the additional imports), producing a new equilibrium exchange rate $e_2 < e_1$ at quantity $Q_2 > Q_1$ — the Jamaican dollar depreciates against the lira.

Solution 3

(d)

Mark scheme

- Jamaica's capital and financial account (CFA) will move into surplus.
Explanation: the fall in net exports from part (b) means Jamaica's current account (CA) moves into deficit; since the balance of payments must balance ($CA + CFA = 0$), the CFA must move into an offsetting surplus.

Question 2

2023 Set 2 ■ Q2

The United States and South Africa are trading partners with flexible exchange rates, and the United States current account balance with South Africa is zero.

(a) Assume real income in the United States increases while real income in South Africa remains the same. Will United States net exports increase, decrease, or remain unchanged? Explain.

(b)(i) Based on your answer to part (a), what will happen to each of the following?
The capital and financial account balance in the United States

(b)(ii) Based on your answer to part (a), what will happen to each of the following?
Actual unemployment in South Africa in the short run. Explain.

(c) The currency of the United States is the dollar (USD), and the currency of South Africa is the rand (ZAR). Draw a correctly labeled graph of the foreign exchange

Question 2

market for the rand and show the effect of the increase in real income in the United States on the international value of the rand.

Solution 2

(a)

Mark scheme

- United States net exports will decrease. Explanation: as U.S. real income rises while South Africa's real income is unchanged, U.S. demand for South African (foreign) goods increases, which increases U.S. imports, so net exports (exports minus imports) fall.

Solution 2

(b)(i)

Mark scheme

- The capital and financial account balance in the United States will move into surplus (increase). This offsets the larger current account deficit caused by the fall in net exports, consistent with the balance of payments identity (current account + capital/financial account = 0).

Solution 2

(b)(ii)

Mark scheme

- Actual unemployment in South Africa will decrease in the short run.
Explanation: the rise in U.S. imports from South Africa means South African exports increase, which increases South African aggregate demand and real GDP, so more workers are hired and unemployment falls.

Solution 2

(c) Mark scheme

- Graph 1: axes are the exchange rate (USD/ZAR, price of rand) on the vertical axis and Quantity of Rand on the horizontal axis, with an upward-sloping supply curve S_{Rand_1} and a downward-sloping demand curve D_{Rand_1} intersecting at equilibrium exchange rate e_1 and quantity Q_1 , both curves and axes correctly labeled. Graph 2 (second point): the demand curve for rand shifts rightward ($D_{Rand_1} \rightarrow D_{Rand_2}$), because higher U.S. real income raises U.S. demand for South African goods and hence demand for rand; this raises the equilibrium exchange rate from e_1 to e_2 and quantity from Q_1 to Q_2 — i.e., the rand appreciates.

Question 3

2022 Set 1 ■ Q3

Italy and Japan are trading partners and have flexible exchange rates. The Italian currency is the euro and the Japanese currency is the yen.

(a) Suppose that the exchange rate between the euro and the yen is $1 \text{ euro} = 100 \text{ yen}$. What is the price of an Italian coat in yen if the coat costs 120 euros in Italy?

(b) Assume that real interest rates increase in Japan. Identify what will happen to net financial capital flows between Italy and Japan.

(c) Draw a correctly labeled graph of the foreign exchange market for the yen and show the effect of the increase in real interest rates in Japan on the value of the yen.

(d) Based solely on the change in the exchange rate identified in part (c), what will happen to Italy's exports to Japan? Explain.

Solution 3

(a)

Mark scheme

- 12,000 yen. Calculation: $120 \text{ euros} \times 100 \text{ yen/euro} = 12,000 \text{ yen}$ (since 1 euro = 100 yen). 1 point for the correct price (12,000 yen).

Solution 3

(b)

Mark scheme

- Net financial capital flows from Italy to Japan will increase. As Japan's real interest rates rise relative to Italy's, Japanese financial assets (e.g., bonds) become relatively more attractive to investors, drawing more financial capital from Italy into Japan. 1 point for correctly stating the increase (direction: Italy $\rightarrow$ Japan).

Solution 3

(c) Mark scheme

- Draw the foreign exchange market for the yen: downward-sloping demand for yen D_{Yen_1} , upward-sloping supply of yen S_{Yen_1} (axes: Euro/Yen [price of yen] vertical, Quantity of Yen horizontal), equilibrium at e_1 , Q_1 — 1 point. Show either a rightward shift in the demand for yen ($D_{Yen_1} \rightarrow D_{Yen_2}$, driven by increased capital flows into Japan) OR a leftward shift in the supply of yen ($S_{Yen_1} \rightarrow S_{Yen_2}$), producing a new equilibrium exchange rate $e_2 > e_1$ — i.e., the yen appreciates — 1 point. Total 2 points; either shift direction is acceptable as long as it results in appreciation of the yen.

Solution 3

(d)

Mark scheme

- Italy's exports to Japan will increase. Explanation: the appreciation of the yen (from part c) makes Italian goods relatively less expensive compared to Japanese goods (equivalently, Japanese goods become relatively more expensive than Italian goods), increasing Japanese demand for Italian exports. 1 point for the correct direction (increase) with this explanation.

Question 1

2021 Set 2 ■ Q1

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

Question 1

2021 Set 2 ■ Q1

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

(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 .

Question 1

2021 Set 2 ■ Q1

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

(c)(i) 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?

The natural rate of unemployment

(c)(ii) 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?

Nominal interest rates. Explain.

Question 1

2021 Set 2 ■ Q1

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

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

Question 1

2021 Set 2 ■ Q1

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

(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.

Question 1

2021 Set 2 ■ Q1

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

(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.

Question 1

2021 Set 2 ■ Q1

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

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

Solution 1

(a)

Mark scheme

- Draw a correctly labeled AD–SRAS–LRAS graph. First point: a downward-sloping AD and upward-sloping SRAS intersecting at the current equilibrium, with dashed lines to the axes labeling the price level PL and real output Y at that intersection. Second point: add a vertical LRAS curve positioned to the LEFT of Y , with its base labeled Y_F (full-employment output), showing the economy is currently above full employment (an inflationary gap). 2 points: 1 for the correctly labeled AD/SRAS graph with PL , Y at the intersection; 1 for the vertical LRAS left of Y labeled Y_F .

Solution 1

(b)

Mark scheme

- On the same graph, show the short-run effect of the income tax cut: AD shifts rightward from AD to AD (an arrow indicating the rightward shift), intersecting SRAS at a higher real output level, labeled Y (with $Y > Y$, shown via a dashed line and rightward arrow along the horizontal axis). 1 point for correctly showing the rightward AD shift and labeling the new short-run equilibrium output Y .

Solution 1

(c)(i)

Mark scheme

- The natural rate of unemployment will NOT change. It is determined by structural/frictional factors in the labor market, not by short-run cyclical changes in real output, so the AD-driven increase in Y from Y_1 to Y_2 has no effect on it. 1 point.

Solution 1

(c)(ii)

Mark scheme

- Nominal interest rates will INCREASE. Explanation: the increase in real output ($Y \rightarrow Y'$) raises households' and firms' income, which increases the (transactions) demand for money; with the money supply unchanged, the higher money demand raises the equilibrium nominal interest rate. 1 point for stating the increase AND giving this explanation.

Solution 1

(d)

Mark scheme

- The central bank should SELL bonds (a contractionary open-market operation) to reduce the money supply and correct the inflationary output gap. 1 point.

Solution 1

(e) Mark scheme

- Draw a correctly labeled money market graph: vertical axis = nominal interest rate, horizontal axis = quantity of money; a vertical money supply curve MS and a downward-sloping money demand curve MD intersecting at nominal interest rate i (1 point). Second point: show MS shifting LEFTWARD to MS (consistent with the central bank selling bonds in part (d)), intersecting MD at a higher nominal interest rate $i' > i$ (dashed lines to i and i' , arrow showing the leftward shift and the upward interest-rate movement). 2 points total: 1 for the correctly labeled base money-market graph, 1 for the leftward MS shift raising the nominal interest rate.

Solution 1

(f)

Mark scheme

- Smithland's currency will APPRECIATE. Explanation: the higher domestic nominal interest rate (from part (e)) attracts financial capital inflows as foreign investors seek the higher returns available in Smithland, which increases the demand for (or decreases the supply of) Smithland's currency on the foreign exchange market, causing it to appreciate. 1 point for stating appreciation AND giving this explanation.

Solution 1

(g)

Mark scheme

- Smithland's imports will INCREASE. Explanation: the appreciation of Smithland's currency makes foreign goods relatively less expensive (cheaper in domestic-currency terms) for Smithland's residents, so the quantity of imports purchased rises. 1 point for stating increase AND giving this explanation.

Question 1

2018 ■ Q1

Assume the United States economy is in recession.

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

(a)(i) Current price level, labeled PL_1

(a)(ii) Current output, labeled Y_1

Question 1

2018 ■ Q1

Assume the United States economy is in recession.

(b) Now assume the euro zone, a major trading partner of the United States, enters into a recession.

(b)(i) What will be the effect on United States exports to the euro zone? Explain.

(b)(ii) On your graph in part (a), show the effect of the change identified in part (b)(i) on real output in the United States.

(b)(iii) What will be the effect of the change identified in part (b)(ii) on unemployment in the United States?

Question 1

2018 ■ Q1

Assume the United States economy is in recession.

(c) Assume the euro zone recession causes a decrease in the demand for United States dollars in the foreign exchange market.

(c)(i) Will the euro appreciate, depreciate, or remain unchanged against the dollar? Explain.

(c)(ii) Draw a correctly labeled graph of the foreign exchange market for dollars, and show the effect of the decrease in the demand for dollars on the exchange rate for dollars.

Question 1

2018 ■ Q1

Assume the United States economy is in recession.

(d) Assume the United States implements a combination of expansionary fiscal and monetary policies. In the absence of complete crowding out, what will be the effect of these policies on each of the following?

(d)(i) Aggregate demand in the United States

(d)(ii) The price level in the United States

(d)(iii) Interest rates in the United States. Explain.

Solution 1

(a)

Mark scheme

- Draw a correctly labeled graph with Price Level on the vertical axis and Real GDP on the horizontal axis, showing a downward-sloping AD curve and an upward-sloping SRAS curve intersecting at one point, plus a vertical LRAS curve drawn to the right of that intersection (at Y_1), indicating the economy is currently producing below potential/full-employment output Y_f . This earns the point for drawing a vertical LRAS curve to the right of Y_1 .

Solution 1

(a)(i)

Mark scheme

- Label the price level at the intersection of AD and SRAS as PL_1 (a dashed line from the intersection to the price-level axis). Together with correctly drawn AD/SRAS curves and the Y_1 label, this earns the one point for 'showing PL_1 and Y_1 at the intersection of AD and SRAS.'

Solution 1

(a)(ii)

Mark scheme

- Label the output level at the intersection of AD and SRAS as Y_1 (a dashed line from the intersection to the real-GDP axis). No separate point is allocated beyond 1(a)(i) — the scoring guidelines award a single combined point for showing both PL_1 and Y_1 at the AD-SRAS intersection.

Solution 1

(b)

Mark scheme

- Setup/preamble sentence introducing the euro-zone recession scenario; carries no points of its own. The 3 points for part (b) are scored across (b)(i)-(b)(iii).

(b)(i)

Mark scheme

- United States exports to the euro zone will decrease. Explanation: the recession lowers income in the euro zone, which reduces euro-zone demand for United States goods (exports).

Solution 1

(b)(ii)

Mark scheme

- On the graph from part (a), show a leftward shift of the aggregate demand curve from AD to AD_2 , with the new intersection with $SRAS$ occurring at a lower output level $Y_2 < Y_1$ (and a lower price level), showing lower U.S. real output.

Solution 1

(b)(iii)

Mark scheme

- Unemployment in the United States will increase, since lower real output/aggregate demand means firms need less labor, raising unemployment.

Solution 1

(c)

Mark scheme

- Setup/preamble sentence introducing the decrease in demand for U.S. dollars in the foreign exchange market; carries no points of its own. The 2 points for part (c) are scored across (c)(i)-(c)(ii).

Solution 1

(c)(i)

Mark scheme

- The euro will appreciate against the U.S. dollar. Explanation: the supply of euros (offered in exchange for dollars) decreases as the demand for dollars falls, OR equivalently, since the dollar depreciates against the euro, the euro must appreciate against the dollar.

Solution 1

(c)(ii)

Mark scheme

- Draw a correctly labeled graph of the foreign exchange market for dollars (Euro/U.S. Dollar exchange rate on the vertical axis, Quantity of U.S. Dollars on the horizontal axis) with an upward-sloping supply curve (S) and a downward-sloping demand curve (D) for dollars. Show the demand curve shifting leftward to D' , producing a lower equilibrium exchange rate $e_2 < e_1$ — i.e., a depreciation of the dollar (equivalently, an appreciation of the euro).

Solution 1

(d)

Mark scheme

- Setup/preamble sentence introducing the combined expansionary fiscal and monetary policy scenario; carries no points of its own. The 3 points for part (d) are scored across (d)(i)-(d)(iii).

Solution 1

(d)(i)

Mark scheme

- Aggregate demand in the United States will increase, since both expansionary fiscal policy (higher government spending / lower taxes) and expansionary monetary policy (lower interest rates stimulating investment/consumption) raise aggregate demand.

Solution 1

(d)(ii)

Mark scheme

- The price level in the United States will increase, since the rightward shift of aggregate demand raises the equilibrium price level along the upward-sloping SRAS curve.

Solution 1

(d)(iii)

Mark scheme

- The change in the interest rate is indeterminate. Explanation: expansionary fiscal policy and expansionary monetary policy have opposite effects on interest rates — expansionary fiscal policy tends to increase the interest rate (government borrowing to finance the higher spending increases the demand for loanable funds), while expansionary monetary policy tends to increase the money supply and decrease the interest rate. Because these two effects work in opposite directions, the net effect on interest rates cannot be determined without more information.

Question 3

2014 ■ Q3

The United States and South Korea are trading partners, and the United States has a zero current account balance. Assume now that the inflation rate in the United States decreases relative to the inflation rate in South Korea.

(a) Based on the decrease in the inflation rate in the United States, will United States exports to South Korea increase or decrease?

(b)(i) Based on the change in United States exports in part (a), answer each of the following.

Will the United States current account balance remain at zero, be in surplus, or be in deficit?

(b)(ii) What will happen to real gross domestic product in the United States in the short run? Explain.

Question 3

(c) The South Korean currency is the won. Draw a correctly labeled graph of the foreign exchange market for the United States dollar. Show the effect of the lower inflation rate in the United States on the won price per United States dollar.

Solution 3

(a)

Mark scheme

- United States exports to South Korea will increase. A decrease in the U.S. inflation rate (relative to South Korea's) makes U.S. goods and services relatively cheaper/more price-competitive on world markets, so South Korean consumers buy more U.S. exports. 1 point for stating that U.S. exports will increase.

Solution 3

(b)(i)

Mark scheme

- The United States current account balance will be in surplus. Since U.S. exports to South Korea have increased while imports are unaffected, net exports rise, moving the current account balance into surplus (or further into surplus). 1 point for stating that the current account will be in surplus.

Solution 3

(b)(ii)

Mark scheme

- Real gross domestic product in the United States will increase in the short run. Explanation: the rise in exports increases aggregate demand, since net exports (a component of $AD = C + I + G + NX$) rise; equivalently, U.S. producers increase production/output to meet the increased export demand from South Korea, raising short-run real GDP. 1 point for stating GDP increases in the short run, with a correct explanation (higher exports raise AD, or firms raise output to meet the increased export demand).

Solution 3

(c) Mark scheme

- Draw a foreign exchange market graph for the U.S. dollar with the exchange rate (won per U.S. dollar) on the vertical axis and quantity of U.S. dollars on the horizontal axis: an upward-sloping supply curve (S) of dollars and a downward-sloping demand curve for dollars (D_1), intersecting at exchange rate e_1 . Because South Korean buyers now need more dollars to purchase the increased U.S. exports, the demand for dollars shifts right from D_1 to D_2 (some solutions equivalently show the supply of dollars shifting left); the new equilibrium exchange rate e_2 (won per dollar) is higher than e_1 — the dollar appreciates (won depreciates) against the won. 1 point for a correctly labeled foreign exchange

Solution 3

market graph; 1 point for shifting the demand for dollars right (and/or supply left) and showing an increase in the won price per U.S. dollar.