

Past-paper walk-through

Balance of Payments Accounts ■ 6.1

eXercise

Questions in this set

- 2025 Set 1 Q1
- 2024 Set 2 Q3
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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 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 1

2021 Set 1 ■ Q1

Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.

(a) Is the Swedish capital and financial account in deficit, in surplus, or in balance? Explain.

Question 1

2021 Set 1 ■ Q1

Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.

(b) Draw a correctly labeled graph of short-run aggregate supply, long-run aggregate supply, and aggregate demand curves for Sweden, and show the current equilibrium real output, labeled Y_1 , and the current equilibrium price level, labeled PL_1 .

Question 1

2021 Set 1 ■ Q1

Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.

(c) Assume the United Kingdom decreases its imports from Sweden. On your graph in part (b), show the new equilibrium real output, labeled Y_2 , and the new equilibrium price level, labeled PL_2 , as a result of this change.

Question 1

2021 Set 1 ■ Q1

Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.

(d) As a result of the decrease in the United Kingdom's imports from Sweden, would policy makers in Sweden be more concerned about cyclical unemployment or inflationary pressures in the short run? Explain.

Question 1

2021 Set 1 ■ Q1

Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.

(e) If the Swedish central bank's goal is to return the economy to long-run equilibrium, what open-market operation should it use?

Question 1

2021 Set 1 ■ Q1

Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.

(f) The currency of the United Kingdom is the pound, and the currency of Sweden is the krona. Draw a correctly labeled graph of the foreign exchange market for the krona, and show the impact of the decrease in the United Kingdom's imports from Sweden on the value of the krona in the foreign exchange market.

Question 1

2021 Set 1 ■ Q1

Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.

(g) If the Swedish central bank's goal is to reverse the exchange rate change shown in part (f) by changing the interest rate, what open-market operation should it use?

Question 1

2021 Set 1 ■ Q1

Assume the economy of Sweden is in long-run equilibrium and has a surplus in its current account.

(h) Explain how the open-market operation identified in part (g) would reverse the change in the exchange rate.

Solution 1

(a)

Mark scheme

- The Swedish capital and financial account (CFA) is in deficit. Explanation: the current account (CA) is stated to be in surplus, and by the balance-of-payments identity $CA + CFA = 0$, so if CA is positive, CFA must be negative, i.e., in deficit.

Solution 1

(b) Mark scheme

- Draw a correctly labeled AD-AS graph with vertical axis 'Price Level' and horizontal axis 'Real GDP': an upward-sloping $SRAS_1$ curve and a downward-sloping AD_1 curve intersecting at price level PL_1 and real output Y_1 (dashed reference lines to both axes). [1 point] For the second point, the same graph must additionally show a vertical LRAS curve located exactly at Y_1 , i.e., LRAS, $SRAS_1$, and AD_1 all intersect at one point (PL_1, Y_1), confirming the economy begins in long-run equilibrium. [1 point] Total 2 points for a correctly labeled three-curve graph (LRAS, $SRAS_1$, AD_1) meeting at (Y_1, PL_1).

Solution 1

(c)

Mark scheme

- On the graph from part (b), shift AD_1 leftward to AD_2 (arrow pointing left), producing a new intersection with $SRAS_1$ at a lower real output Y_2 ($Y_2 < Y_1$) and a lower price level PL_2 ($PL_2 < PL_1$), both shown with dashed reference lines to the axes. This reflects the UK's decreased imports from Sweden reducing Swedish net exports and shifting AD left.

Solution 1

(d)

Mark scheme

- State that Swedish policymakers would be more concerned about cyclical unemployment than inflationary pressures in the short run. Explain: the decline in exports to the United Kingdom lowered real output below full employment (Y_2 is below the LRAS level Y_1), pushing unemployment above the natural rate of unemployment.

Solution 1

(e)

Mark scheme

- The Swedish central bank should buy bonds — an expansionary open-market purchase that increases the money supply and lowers interest rates, stimulating AD back toward long-run equilibrium output Y_1 .

Solution 1

(f) Mark scheme

- Draw a correctly labeled foreign-exchange market graph for the krona: vertical axis 'Pounds per Krona,' horizontal axis 'Quantity of Krona,' with an upward-sloping supply curve S_1 and a downward-sloping demand curve D_1 intersecting at exchange rate e_1 and quantity Q_1 (dashed lines to axes). [1 point] For the second point, show the demand curve for krona shifting leftward from D_1 to D_2 (the UK now buys fewer Swedish goods, so it needs fewer krona to pay for them), giving a new lower equilibrium exchange rate e_2 ($e_2 < e_1$, marked below e_1) — i.e., a decrease in the value of the krona. [1 point] Total 2 points.

Solution 1

(g)

Mark scheme

- Sweden's central bank should sell bonds — a contractionary open-market sale that raises domestic interest rates, intended to reverse the krona's depreciation shown in part (f).

Solution 1

(h)

Mark scheme

- Explain that selling bonds decreases the money supply and increases interest rates in Sweden; the higher interest rates increase financial capital inflows into Sweden, which increases demand for the krona in the foreign exchange market, thereby leading to an appreciation (increase in value) of the krona — reversing the exchange-rate change from part (f).

Question 2

2019 Set 2 ■ Q2

The European Union and the United States are trading partners.

(a) If the current account balance is zero, will an increase in United States real income result in a current account surplus, deficit, or no change? Explain.

(b) Draw a correctly labeled graph of the foreign exchange market for the euro. On your graph, show the effect of the increase in United States real income on the value of the euro relative to the United States dollar.

(c)(i) Now assume interest rates increase in the European Union.

What is the effect of the increase in interest rates in the European Union on the demand for the United States dollar? Explain.

(c)(ii) Based on your answer to part (c)(i), what is the effect on the value of the United States dollar relative to the euro?

Solution 2

(a)

Mark scheme

- The U.S. current account will move into (or further into) DEFICIT.
Explanation: an increase in U.S. real income raises U.S. demand for goods and services, including goods and services imported from the European Union; with exports unchanged, this rise in imports worsens net exports and pushes the current account balance toward deficit.

Solution 2

(b) Mark scheme

- Draw a foreign exchange market graph for the euro: price = Dollar per Euro on the vertical axis, Quantity of Euro on the horizontal axis, with a downward-sloping demand curve D_1 and an upward-sloping supply curve S_1 intersecting at the initial equilibrium exchange rate e_1 and quantity Q_1 . Then show the effect of the increase in U.S. real income: because higher U.S. income raises U.S. demand for European (euro-priced) goods and services, the DEMAND for euros shifts RIGHTWARD from D_1 to D_2 , raising the equilibrium exchange rate from e_1 to a higher e_2 — i.e. the euro APPRECIATES relative to the U.S. dollar (equivalently, the dollar depreciates against the euro). Full credit requires: (1) a correctly

Solution 2

labeled initial FX market graph for the euro, and (2) the demand for euros shifting right with the value of the euro rising from e_1 to e_2 .

Solution 2

(c)(i)

Mark scheme

- The DEMAND for the U.S. dollar will DECREASE. Explanation: as interest rates rise in the European Union, EU financial assets become relatively more attractive (offer higher returns) than U.S. assets, so financial capital flows from the European Union to the United States decrease; with fewer investors needing dollars to purchase U.S. assets, the demand for the dollar falls.

Solution 2

(c)(ii)

Mark scheme

- The value of the U.S. dollar relative to the euro will DEPRECIATE (fall). Since the demand for the dollar decreased (from part (c)(i)) while the supply of dollars is unchanged, the equilibrium price of the dollar in terms of euros falls — the dollar depreciates against the euro (equivalently, the euro appreciates against the dollar).

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.