4.6 Balance of payments (includes HL only sub-topics)

Level7 Education

Learning objectives

4.6 Balance of payments (includes HL only sub-topics)	Depth	Diagrams and calculations
Balance of payments • Credit and debit items • Surplus or deficit on an account	AO1 AO4	Calculation: elements of the balance of payments from a set of data

Learning objectives

4.6 Balance of payments (includes HL only sub-topics)	Depth	Diagrams and calculations
Components of the balance of payments Current account • Balance of trade in goods • Balance of trade in services • Income • Current transfers Financial account • Foreign direct investment • Portfolio investment • Reserve assets • Official borrowing Capital Account • Capital transfers • Transactions in non-produced, non-financial assets	AO2	

Level7 Education

Learning objectives

4.6 Balance of payments (includes HL only sub-topics)	Depth	Diagrams and calculations
Interdependence between the accounts • Zero balance in the balance of payments • Credits matched by debits • Deficits matched by surpluses	AO2	Calculation: elements of the balance of payments from a set of data
Relationship between the current account and the exchange rate (HL only)	**AO2** **AO4**	**Diagram (HL only): on exchange rate showing the relationship between the current account balance and the exchange rate**

Learning objectives

4.6 Balance of payments (includes HL only sub-topics)	Depth	Diagrams and calculations
Implications of a persistent current account deficit in terms of: **(HL only)** • **exchange rates** • **interest rates** • **foreign ownership of domestic assets** • **debt** • **credit ratings** • **demand management** • **economic growth**	**AO3**	

Level7 Education

Learning objectives

4.6 Balance of payments (includes HL only sub-topics)	Depth	Diagrams and calculations
Methods to correct a persistent current account deficit (HL only) • Expenditure switching • Expenditure reducing • Supply-side policies	AO2	
Effectiveness of measures to correct a persistent current account deficit (HL only)	AO3	
The Marshall-Lerner condition and the J-curve effect (HL only)	AO2 AO4	Diagram (HL only): J-curve with reference to the Marshall-Lerner condition

Learning objectives

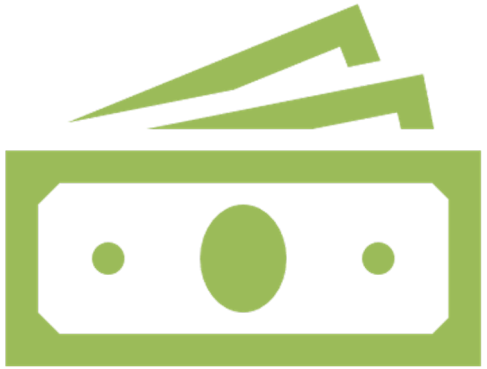
4.6 Balance of payments (includes HL only sub-topics)	Depth	Diagrams and calculations
Implications of a persistent current account surplus in terms of (HL only): • **domestic consumption and investment** • **exchange rates** • **inflation** • **employment** • **export competitiveness**	**AO3**	

Level7 Education

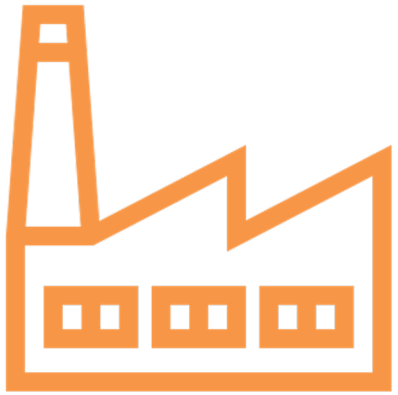
Introduction

International trade between countries involve transactions between different stakeholders. All international transactions of a country are recorded in their **balance of payments**.

The balance of payments consists of three accounts:



The Current Account



The Capital Account

The Financial Account

Level7 Education

The Balance of Payments (BOP)

The balance of payments is known to 'balance' as the sum of the three accounts is equal to zero:

$$\text{Current Account} + \text{Financial Account} + \text{Capital Account} + \textit{Net errors and omissions} = 0$$

Discounting net errors and omissions, the BOP can be rewritten as:

$$\text{Current Account} = -(\text{Financial Account} + \text{Capital Account})$$

An increase in the current account balance is followed by an equal decrease in the financial and capital accounts, and vice versa.

Level7 Education

Debits and Credits

In national income accounting, money items are sorted into **debits (Dr)** and **credits (Cr)**.

Outflows of money are known as **debits**.

Inflows of money are known as **credits**.

Debits and Credits

A debit value in the current account is matched with an identical credit value in the financial account and/or capital account.

Similarly, a credit value in the current account is matched with an identical debit value in the financial account and/or capital account.

$$\text{Current Account} = \text{Financial Account} + \text{Capital Account}$$

Debits and Credits

As a result, a deficit in the current account is matched with a surplus in the financial account and/or capital account.

Similarly, a surplus in the current account is matched with a deficit in the financial account and/or capital account.

$$\text{Current Account} = \text{Financial Account} + \text{Capital Account}$$

Components of the balance of payments – current account

The current account consists of four components:

- Balance of trade in goods (visible trade)
- Balance of trade in services (invisible trade)
- Income
- Current transfers

$$\text{Current account balance} = \text{Sum of net exports of goods and services} + \text{Net income} + \text{Net current transfers}$$

Level7 Education

Current account – Balance of trade in goods and services

In the current account, net exports $(X - M)$, a component of AD, is categorised into trade in goods and trade in services. It is often the largest component of the current account.

The **balance of trade in goods** measures net exports of physical goods between a country and the rest of the world.

The **balance of trade in services** records the net exports of services between a country and the rest of the world.

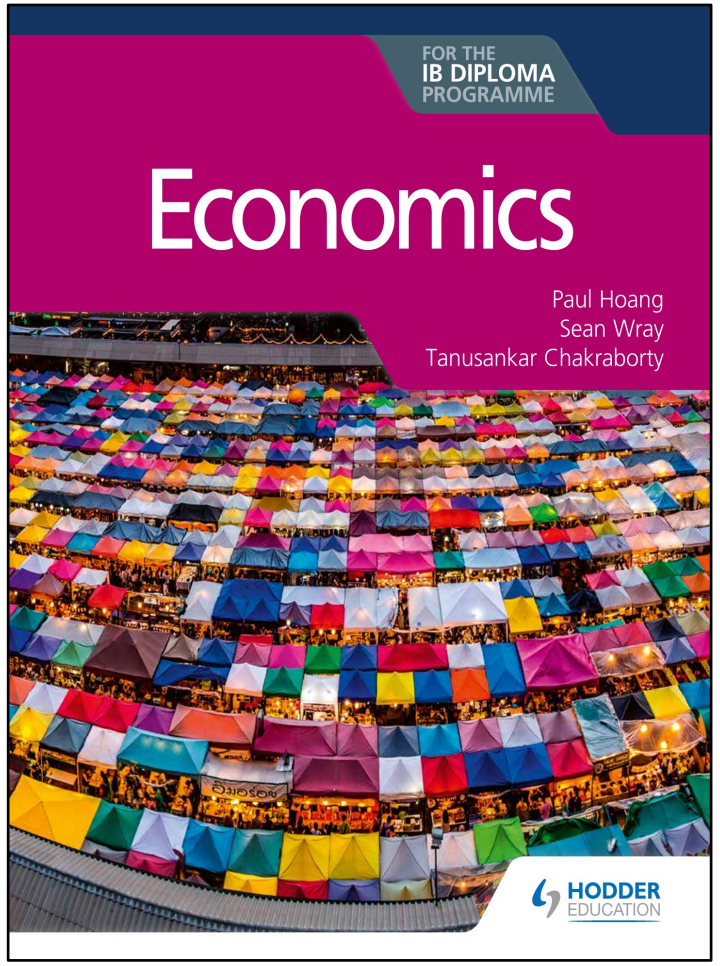
Level7 Education

Over to you…

Hoang, Wray, & Chakraborty (2020)

Economics for the IB Diploma Programme

- Page 510
- Paper 2 and 3 Exam Practice Question 32.1
- [4 marks]



Current account – Income

Income refers to rent, wages, interest, and profits earned from the factors of production.

Net income from abroad = Income from abroad – Income paid abroad

Level7 Education

Current account – Current Transfers

Current transfers are the inflows and outflows of money that are not made in exchange for trade or any corresponding output.

Examples include foreign aid, government grants, concessionary loans and donations between a country and the rest of the world.

$$\text{Net current transfers} = \text{Current transfers from abroad} - \text{Current transfers sent abroad}$$

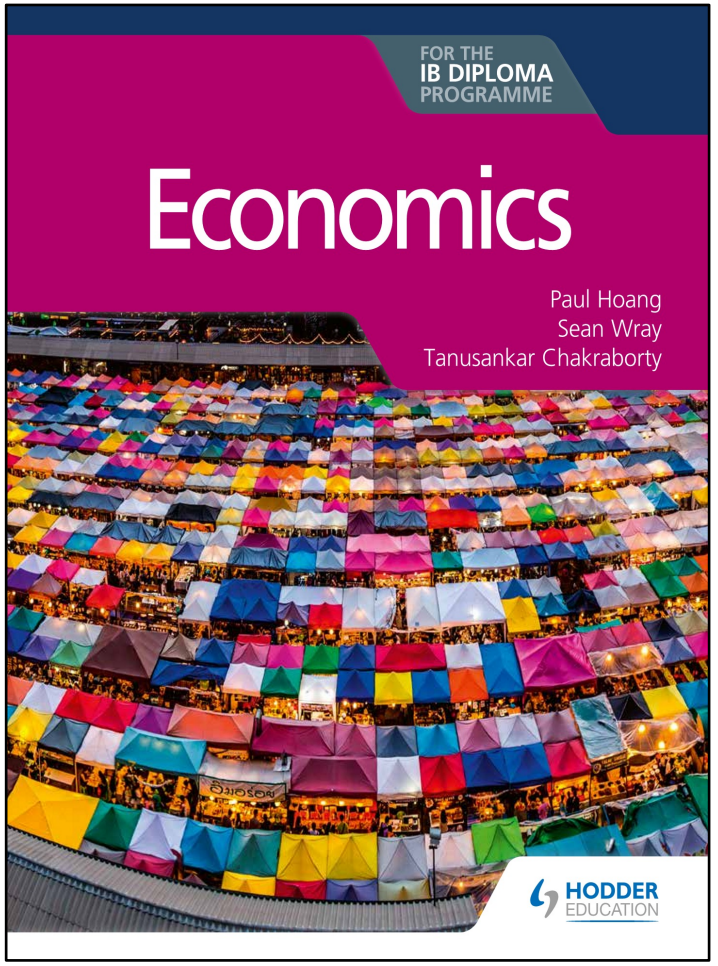
Level7 Education

Over to you…

Hoang, Wray, & Chakraborty (2020)

Economics for the IB Diploma Programme

- Page 514, 515
- Paper 2 and 3 Exam Practice Question 32.2, 32.3
- [2 + 2 + 2 marks] + [2 + 2 + 2 + 2 marks]



Components of the balance of payments – financial account

The financial account consists of four elements:

- Foreign direct investment (FDI)
- Portfolio investment
- Reserve assets
- Official borrowing

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Financial account - Foreign Direct Investment

Foreign direct investment (FDI) refers to long term capital investments by multinational corporations (MNCs) in foreign economies.

Examples include MNCs setting up facilities in overseas locations, or existing MNCs expanding their operations.

$$\text{Net FDI} = \text{Inward FDI} - \text{Outward FDI}$$

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Financial account - Portfolio investment

Portfolio investment refers to financial investments into foreign assets such as equities, bonds, and real estate.

$$\text{Portfolio Investment} = \text{sales of domestic portfolio assets} - \text{purchases of overseas portfolio assets}$$

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Financial account - Reserve assets

Reserve assets include foreign currency reserves and liquid assets held by central banks used to influence the exchange rate (see Unit 4.5 Exchange Rates).

Financial account - Official borrowing

Official borrowing refers to government borrowing from foreign banks or loans from the International Monetary Fund (IMF) for development purposes.

In the short run, these loans would represent a credit to the financial account. In the long run, as the repayments are made with interest, this would represent a debit on the financial account.

Components of the balance of payments – capital account

The **capital account** consists of two elements:

- Capital transfers
- Transactions in non-produced, non-financial assets

The capital account is the smallest section of the balance of payments. It records the different forms of capital inflows and outflows of a country.

$$\text{Capital account balance} = \text{Capital transfers received from abroad} - \text{Capital transfers sent abroad}$$

Capital account - Capital transfers

Capital transfers are the different forms of capital inflows and outflows of a country. Examples include:

- Debt forgiveness
- Developmental aid
- Money and assets brought into an economy by immigrants and emigrants.

Capital account - Transactions in non-produced, non-financial assets

Transactions in non-produced, non-financial assets include:

- Property rights to natural resources
  - land rights, mineral rights, fishing rights
- Intellectual property rights (IPR) to intangible assets
  - trademarks, copyrights, brands, patents.

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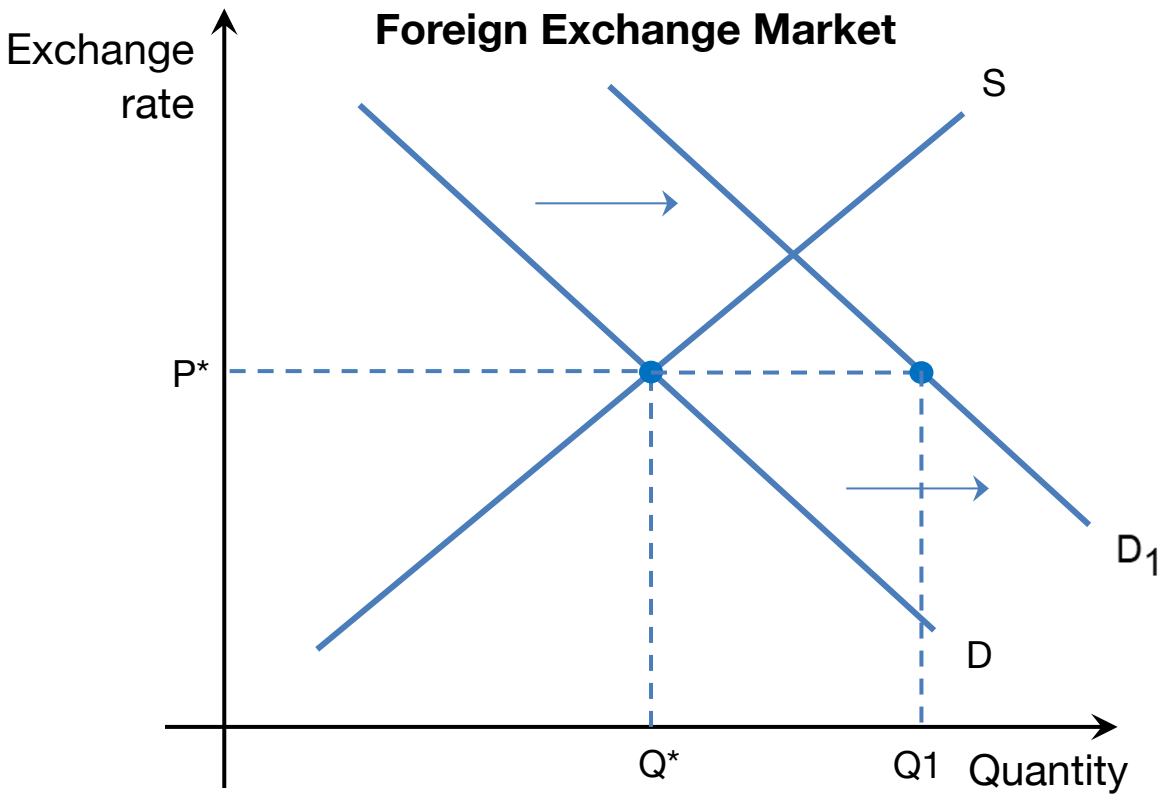
The Current Account and Exchange Rates – surpluses (HL only)

Surpluses and deficits in the current account are corrected through a floating exchange rate system.

An increase in demand for a currency leads to excess demand in the currency, resulting in a short-run surplus in the nation's current account.

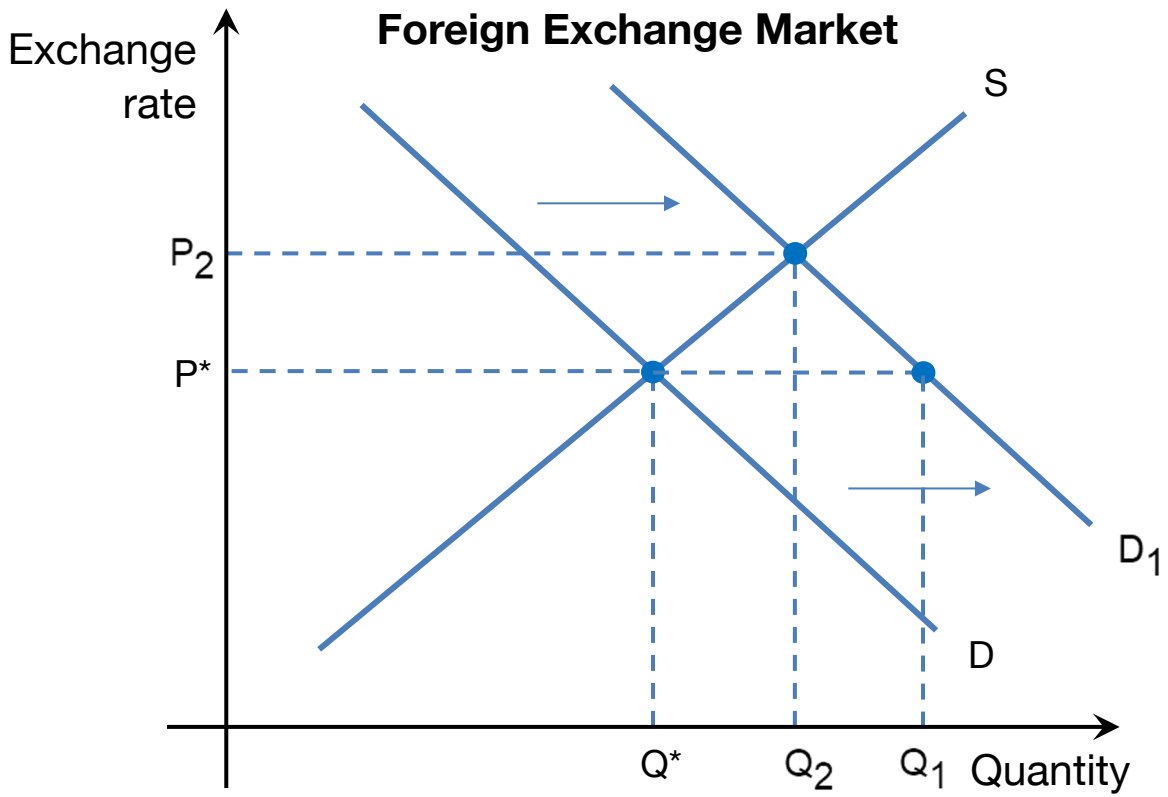


Level7 Education

The Current Account and Exchange Rates – surpluses (HL only)

Over time, market forces will put upward pressure on the exchange rate, causing the currency to appreciate.

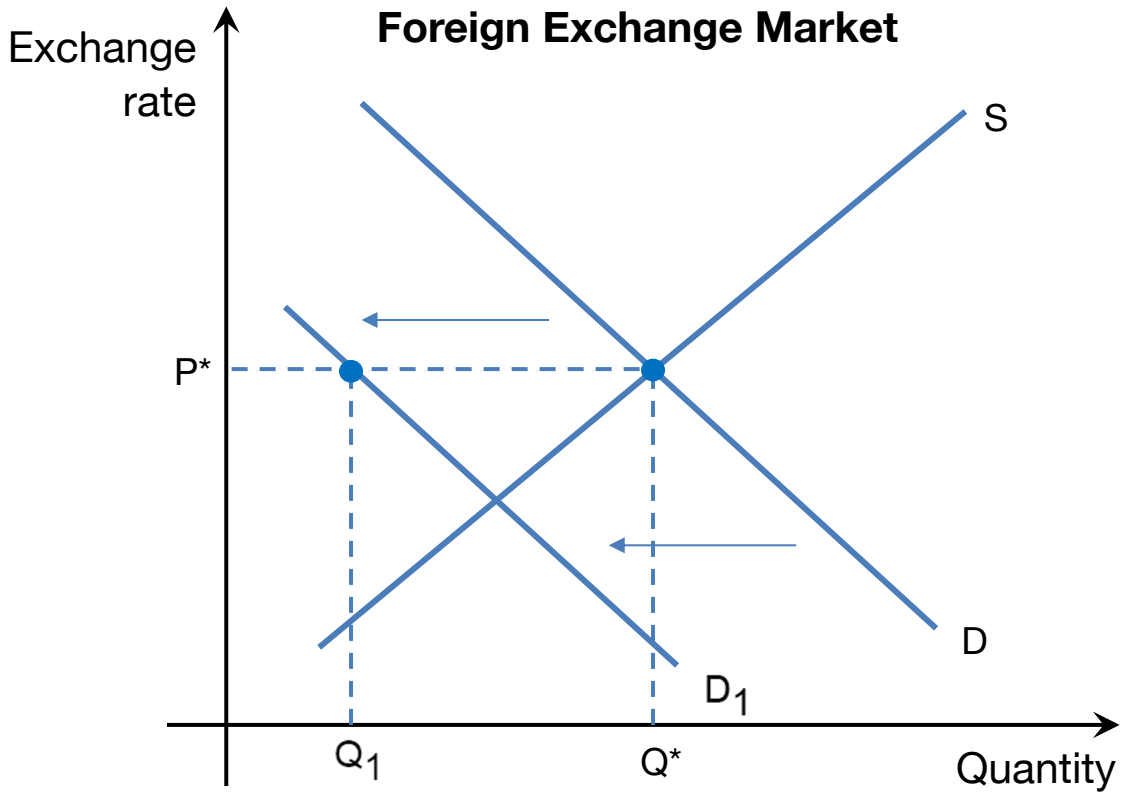
As a result, exports become relatively more expensive, and imports become relatively cheaper. The current account surplus is eventually balanced.



Level7 Education

The Current Account and Exchange Rates – deficits (HL only)

A fall in demand for a currency leads to a shortage in the currency, resulting in a short-run deficit in the nation's current account.

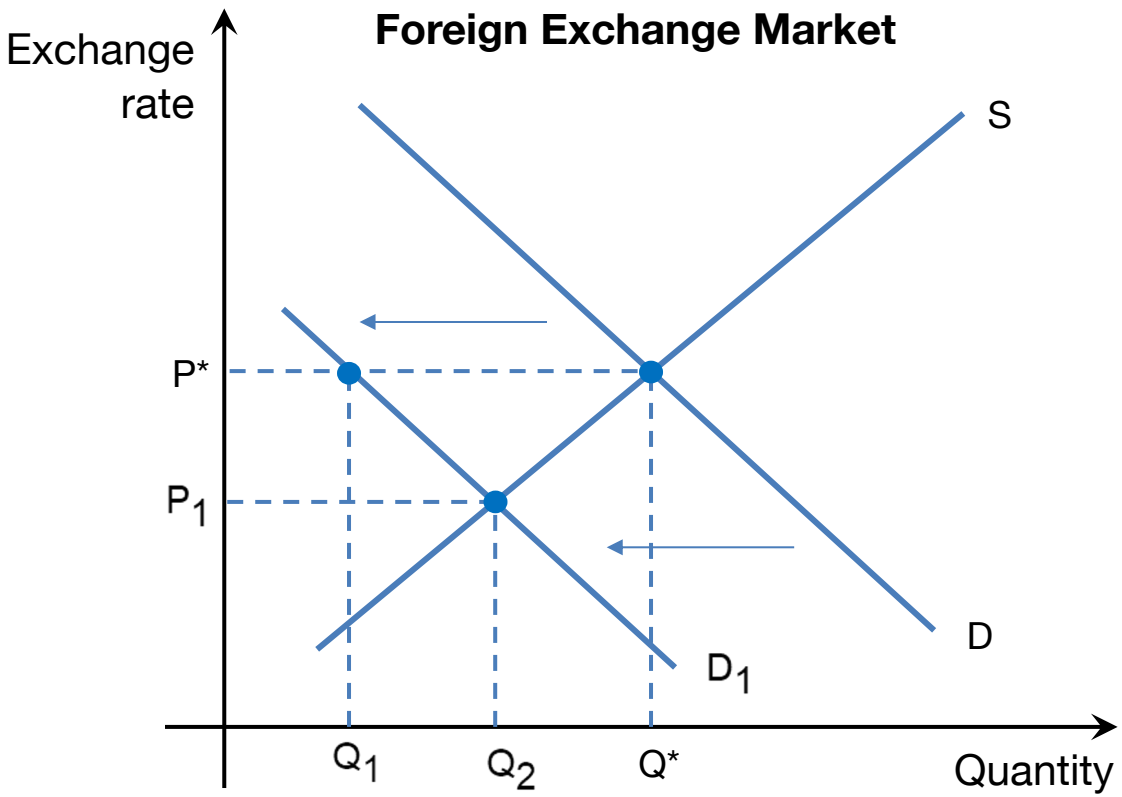


Level7 Education

The Current Account and Exchange Rates – deficits (HL only)

Over time, market forces will create downward pressure on the exchange rate, causing the currency to depreciate.

As a result, exports become relatively cheaper, and imports relatively more expensive. The current account surplus is eventually corrected.



Level7 Education

Real world example - data analysis

Source: Visualizing the UK and EU Trade Relationship

Data Analysis Questions

1. What do you notice from the data?
2. What questions do you wonder about the data?
3. Research information that may help you answer your questions from Q2.
4. What conclusions can you make from Q1, Q2, and Q3?

Implications of a Persistent Current Account Surplus (HL only)

Although it may seem desirable to have a persistent current account surplus, there are various economic consequences to consider:

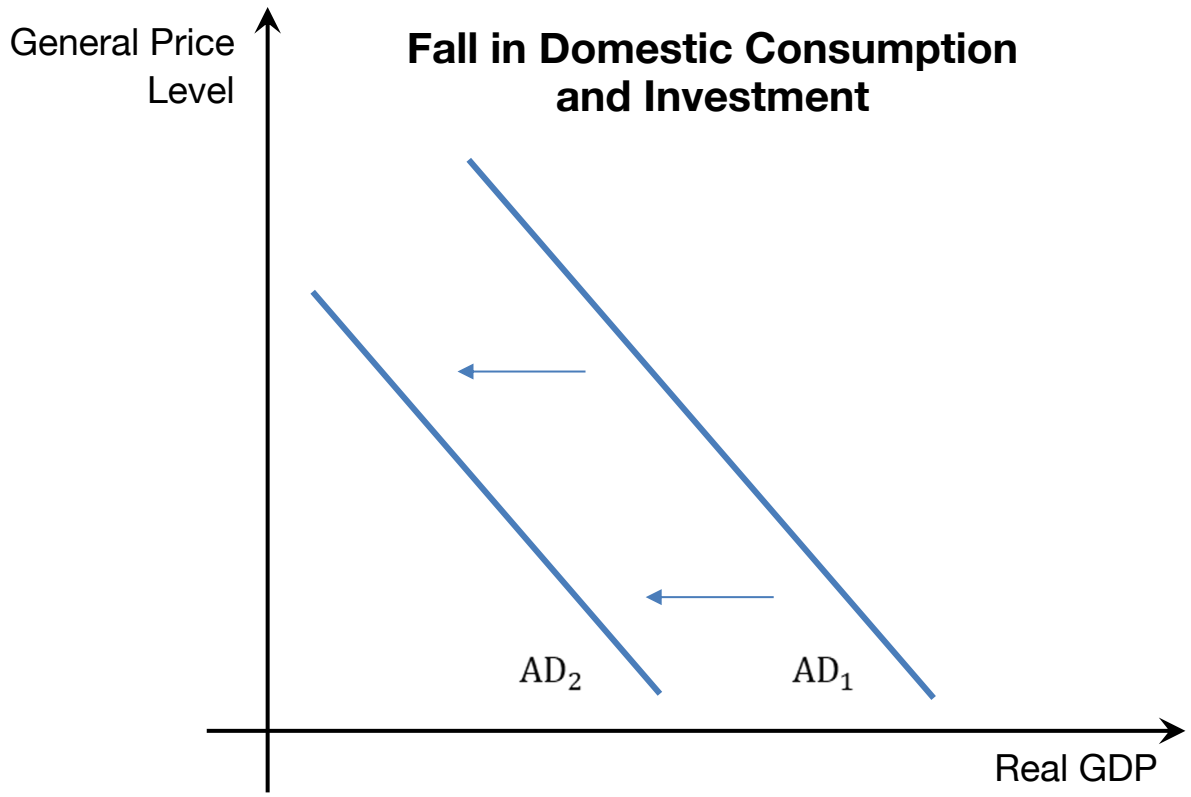
- domestic consumption and investment
- exchange rates
- inflation
- employment
- export competitiveness.

Implications of a Persistent Current Account Surplus (HL only)

Domestic Consumption and Investment

If a surplus is due to falling imports, it may signal decreasing incomes and therefore a lower standard of living.

A current account surplus likely signifies a financial account deficit which means an outflow of funds from the country and lower levels of domestic investment.



Level7 Education

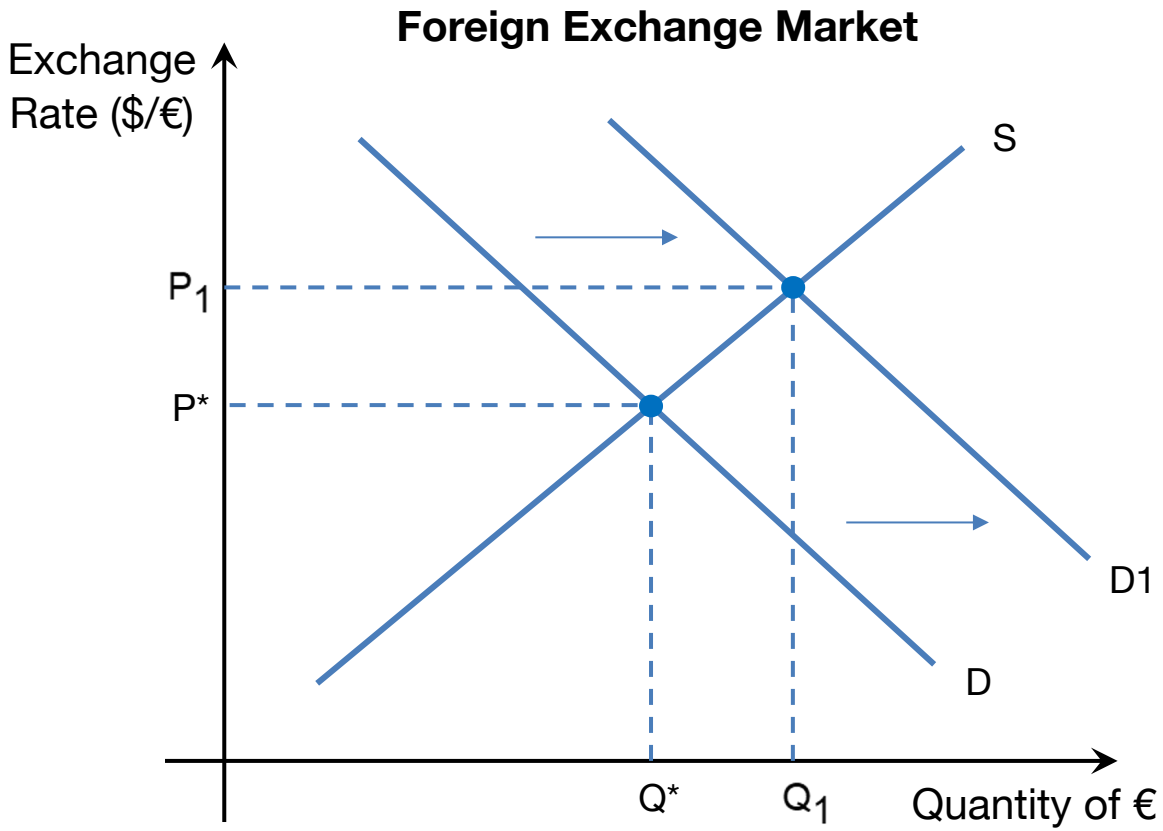
Implications of a Persistent Current Account Surplus (HL only)

Exchange Rates

A current account surplus will increase demand for a nation's currency, putting upwards pressure on the exchange rate.

This appreciates the currency, reducing the price competitiveness of exports and improving the competitiveness of imports.

As a result, this may reduce aggregate demand and slow growth.

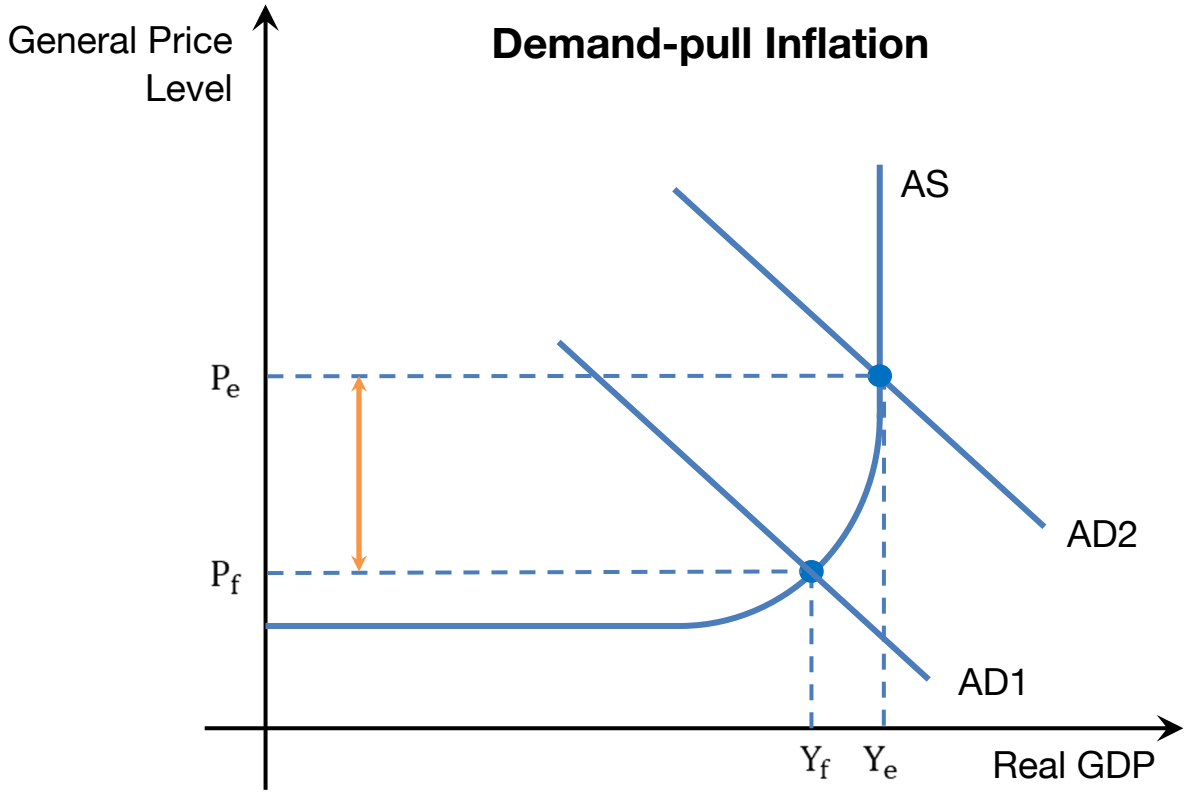


Level7 Education

Implications of a Persistent Current Account Surplus (HL only)

Inflation

A persistent current account surplus signifies a positive trade balance. If net exports are increasing over time, this may lead to demand-pull inflation.



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Implications of a Persistent Current Account Surplus (HL only)

Employment

Higher competitiveness in the exporting industries improves employment levels in the economy. The more competitive advantage a country gains, the more it will benefit the current account, economic growth and employment levels in the country.

Level7 Education

Implications of a Persistent Current Account Surplus (HL only)

Export Competitiveness

A persistent current account surplus will lead to a currency appreciation under a floating exchange rate system, making exports relatively more expensive and hence less price competitive.

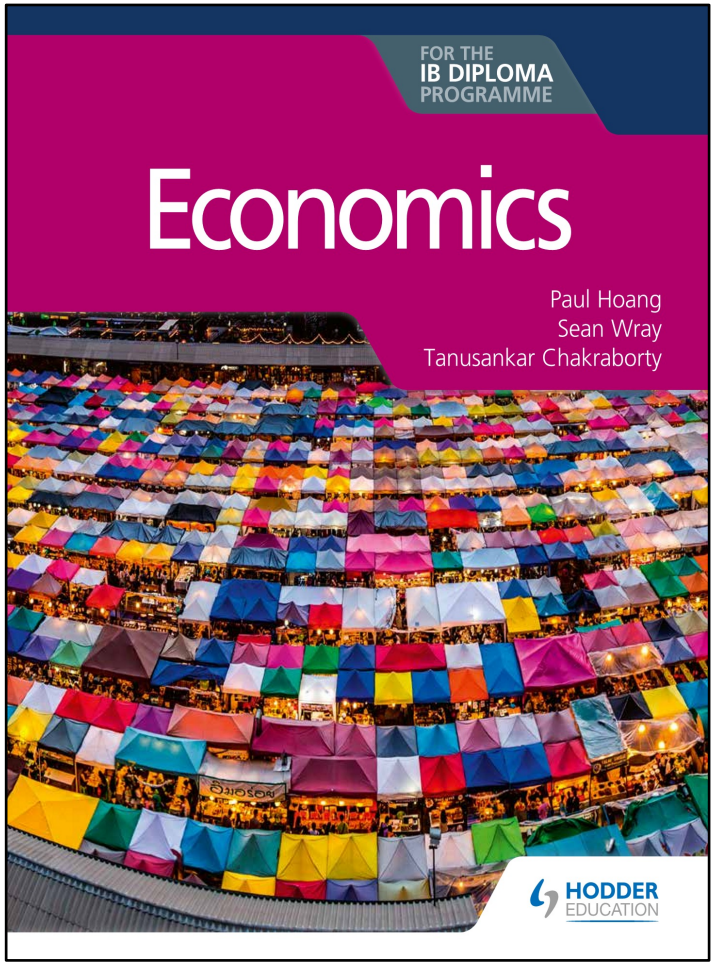
Level7 Education

Over to you…

Hoang, Wray, & Chakraborty (2020)

Economics for the IB Diploma Programme

- Page 525
- Paper 2 and 3 Exam Practice Question 32.5
- [2+4 marks]



Real world example

Article: India reports current account surplus of 0.9% in pandemic-affected FY21

1. What caused the current account surplus in India?
2. What are the advantages of a current account surplus?

Implications of a Persistent Current Account Deficit (HL only)

A current account deficit impacts an economy in terms of:

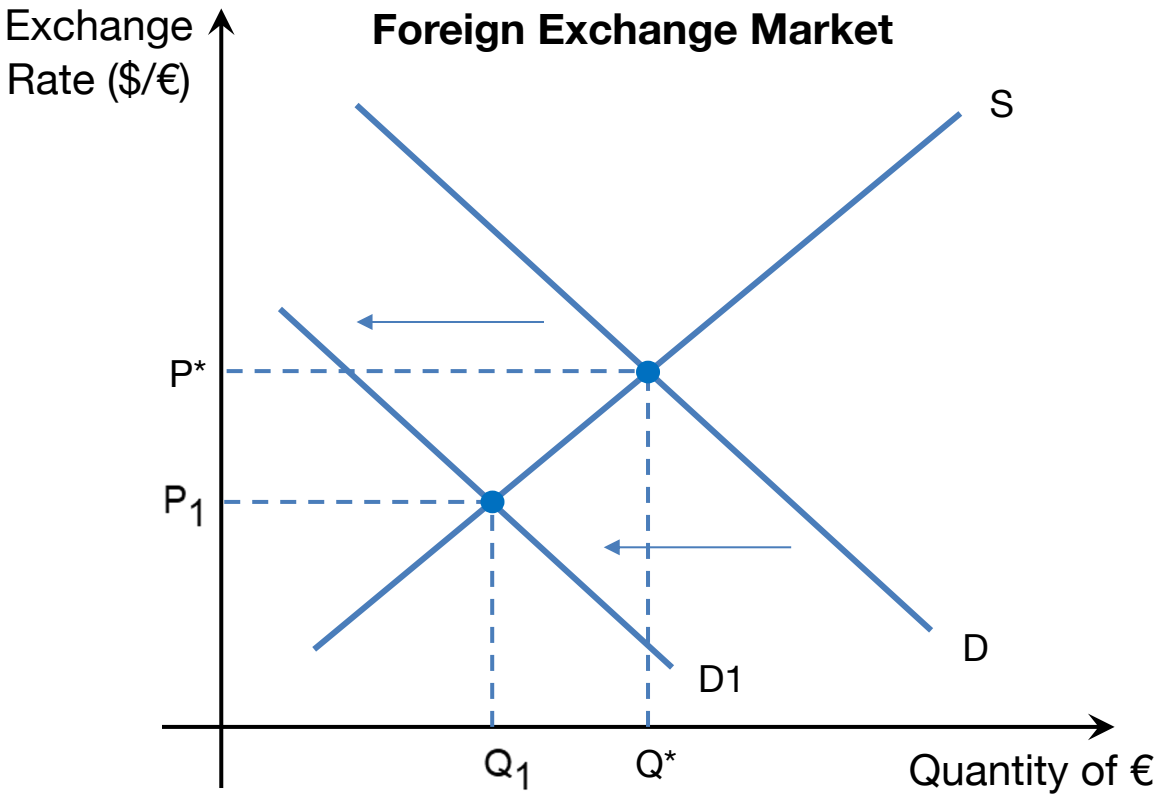
- exchange rates
- interest rates
- foreign ownership of domestic assets
- debt
- credit ratings
- demand management
- economic growth

Implications of a Persistent Current Account Deficit (HL only)

Exchange Rates

A current account deficit will lower demand for a nation's currency, putting downwards pressure on the exchange rate.

As a result, this may lead to imported inflation and make foreign debt more difficult to repay.



Level7 Education

Implications of a Persistent Current Account Deficit (HL only)

Interest Rates

The country may need to attract foreign financial investments by offering higher interest rates if they have difficulty obtaining loans.

Higher interest rates can lead to a fall in consumption and investment. This lowers national output and may lead to greater unemployment.

Level7 Education

Implications of a Persistent Current Account Deficit (HL only)

Foreign Ownership of Domestic Assets

A current account deficit must be funded by the financial account, and to a lesser extent, the capital account.

As a result, domestic assets such as stocks and bonds, real estate, and factories will be sold to foreign buyers, reducing national sovereignty and the nation's degree of control over its assets.

Implications of a Persistent Current Account Deficit (HL only)

Debt

As a current account deficit persists, the value of a nation's currency will continue to depreciate.

As a result, it becomes increasingly difficult to repay foreign debt as the weak exchange rate means the country will need to make higher repayments in its own currency. Overall, the opportunity cost increases of reduced government spending.

Implications of a Persistent Current Account Deficit (HL only)

Credit Ratings

A current account deficit will lead to a surplus in a country's financial account. If the country is unable to repay its debt, credit rating agencies may lower its credit rating.

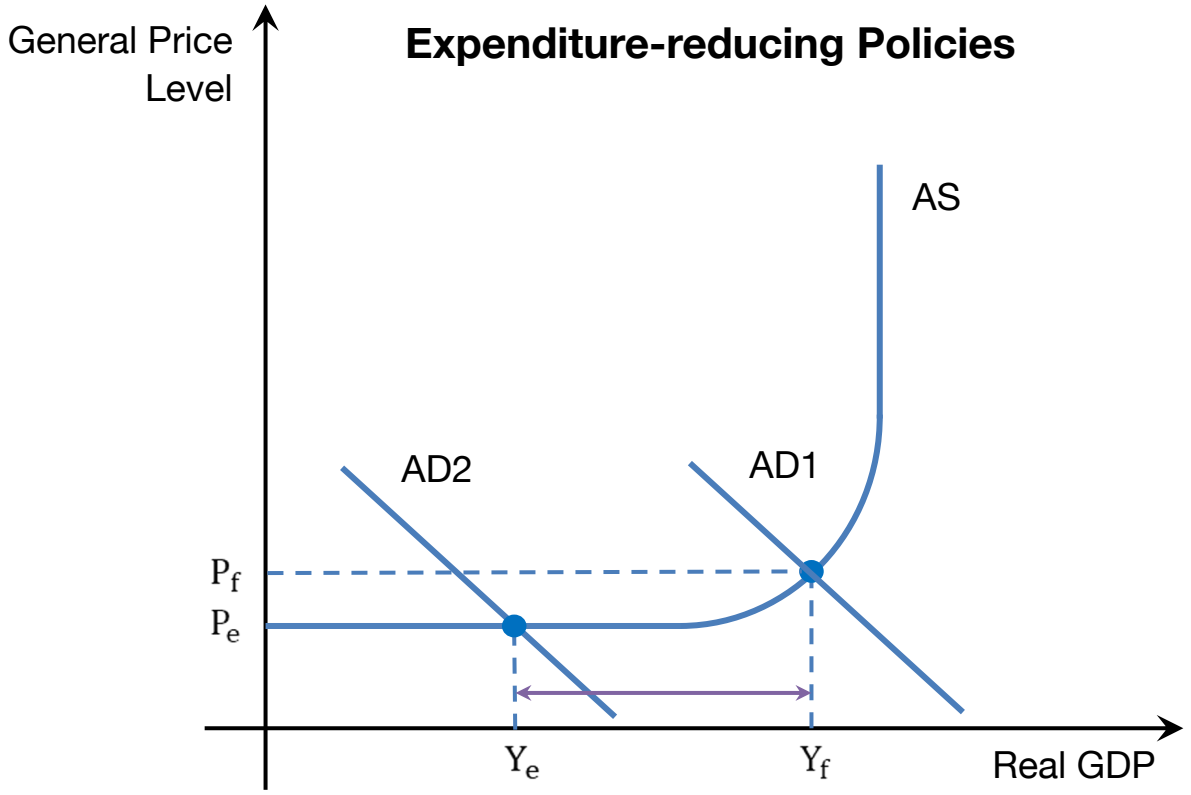
This makes it more difficult for the country to continue to borrow money in the future, reducing potential government spending.

Implications of a Persistent Current Account Deficit (HL only)

Demand Management

Expenditure reducing policies such as contractionary fiscal and monetary policy can be used to reduce income and hence the demand for imports, correcting a persistent current account deficit.

However, this can negatively affect economic growth and employment.



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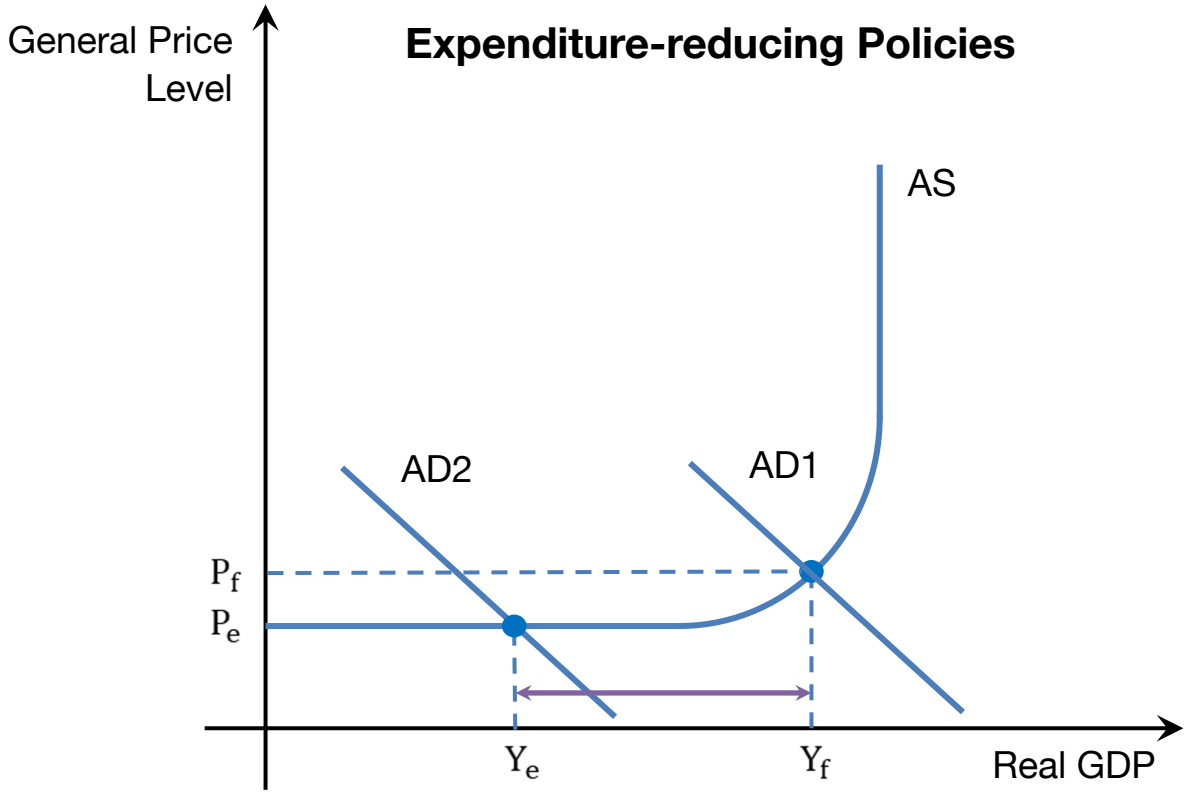
Implications of a Persistent Current Account Deficit (HL only)

Economic Growth

As a current account deficit is often caused by a negative trade balance, a persistent current account deficit will reduce net exports (X – M), ultimately reducing aggregate demand.

Overall, this will reduce economic growth.



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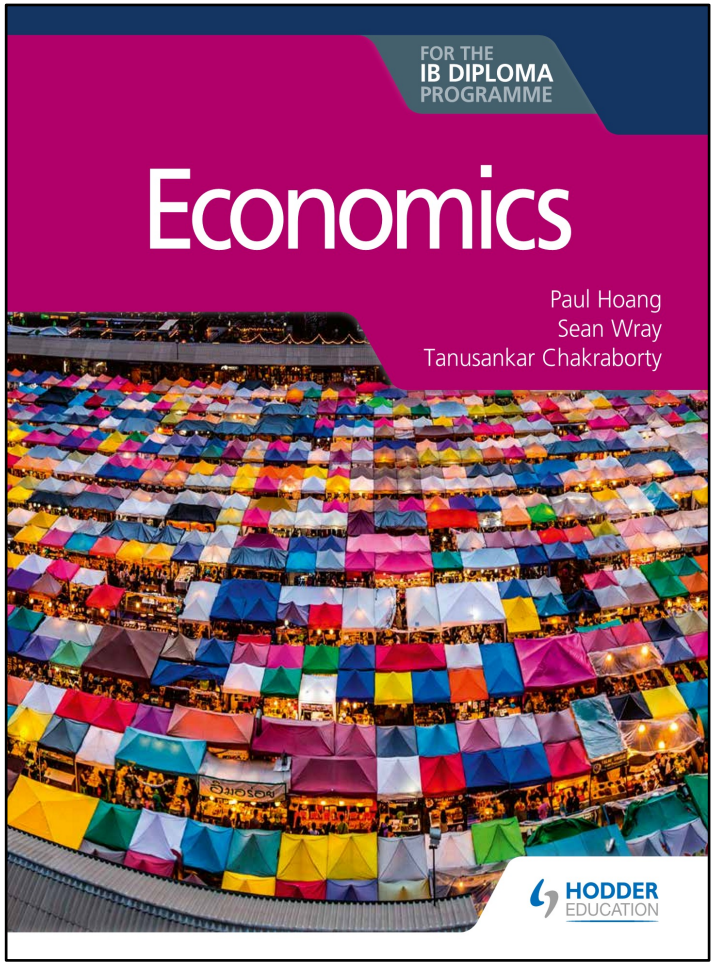
Over to you…

Hoang, Wray, & Chakraborty (2020)

Economics for the IB Diploma Programme

- Page 521
- Paper 2 and 3 Exam Practice Question 32.4
- [2 + 4 marks]



Methods to correct a persistent current account deficit (HL only)

There are three main ways of correcting a current account deficit:

- Expenditure-switching policies
- Expenditure-reducing policies
- Supply-side policies

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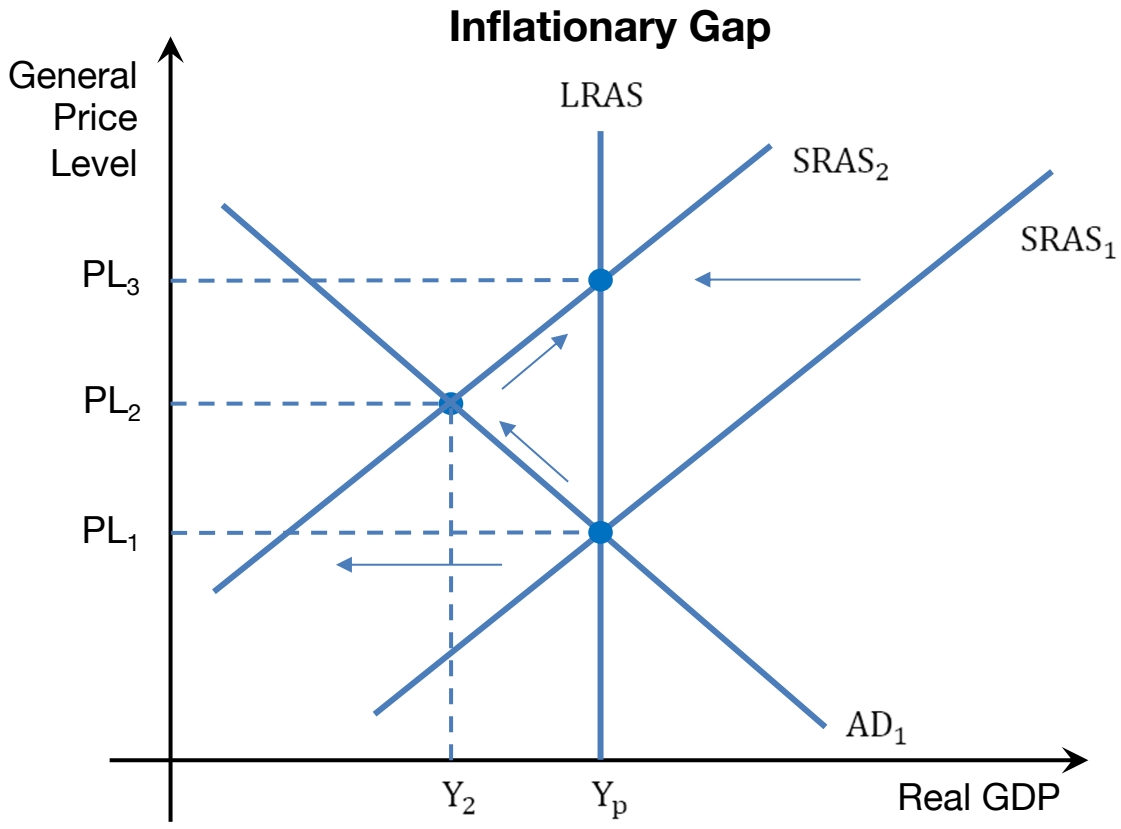
Methods to correct a persistent current account deficit (HL only)

Expenditure-switching policies involves the use of protectionist measures to switch consumption away from imports and towards domestic goods.

Tariffs, quotas, and subsidies are used to reduce imports of goods and services while encouraging domestic production.

However, the use of expenditure switching policies may lead to retaliation and increased cost of imported raw materials and subsequently cost-push inflation.



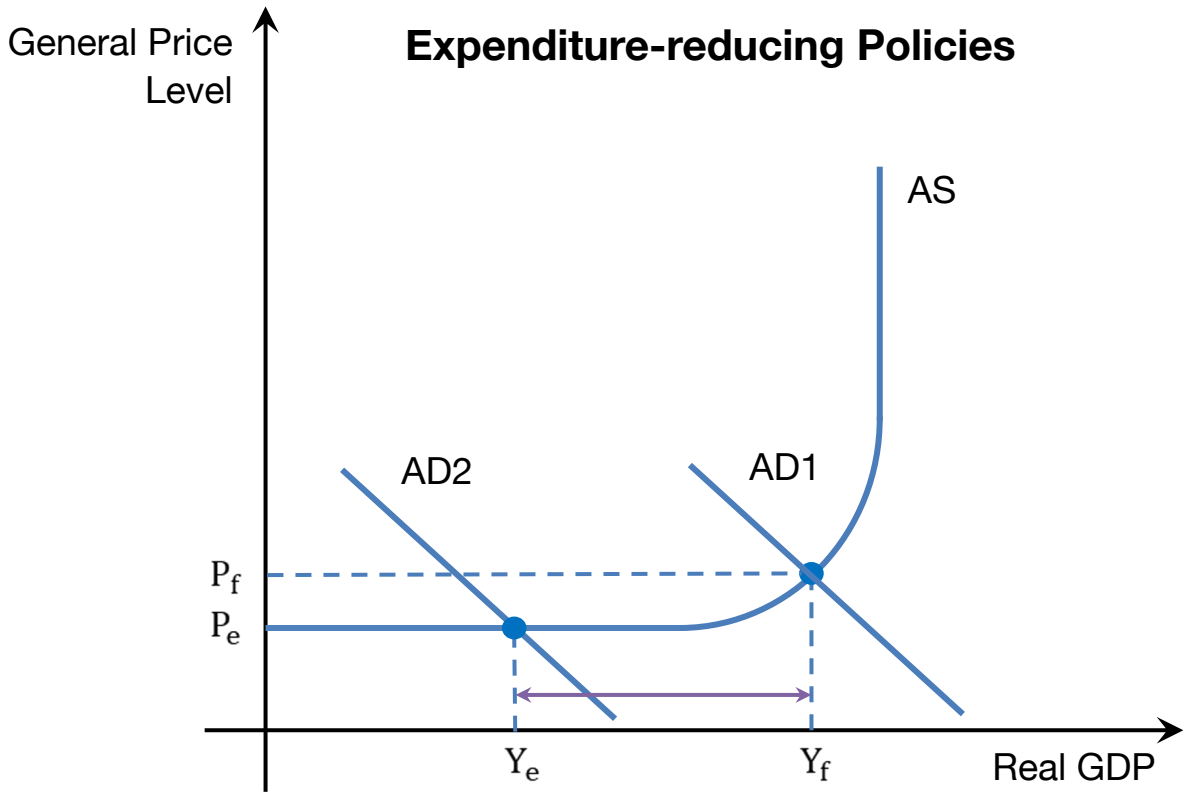
Level7 Education

Methods to correct a persistent current account deficit (HL only)

Expenditure-reducing policies uses contractionary monetary and fiscal policy to reduce incomes.

A reduction in income should lead to a reduction in imports, hence improving the current account deficit.

However, this negatively impacts economic growth and employment.



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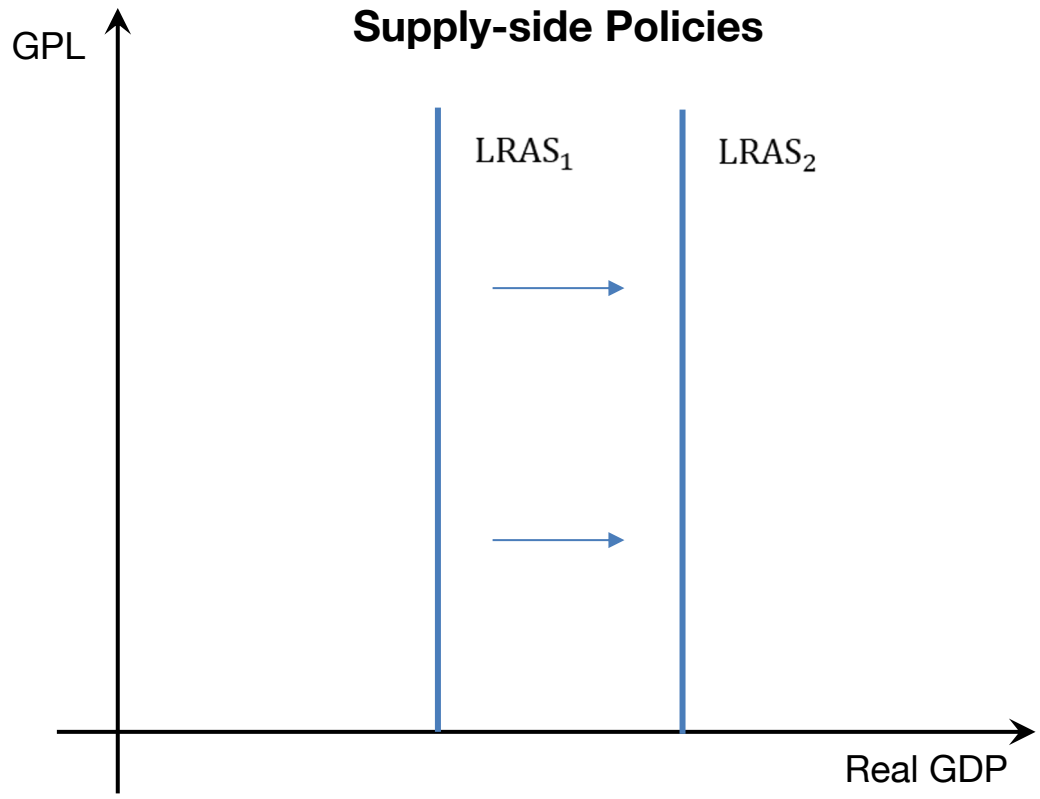
Methods to correct a persistent current account deficit (HL only)

Supply-side policies can improve the long-term competitiveness of a nation's exports by increasing productive capacities.

Overall, this can improve a persistent current account deficit without the disadvantages of expenditure-switching and expenditure-reducing policies.

However, interventionist supply-side policies often incur time lags and opportunity costs.



Level7 Education

The Marshall-Lerner Condition (HL only)

The Marshall–Lerner condition (MLC) describes the circumstances under which a depreciation of the domestic currency will lead to an improvement in the current account.

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The Marshall-Lerner Condition (HL only)

The **Marshall-Lerner Condition** states that:

$$\text{PED of exports} + \text{PED of imports} > 1$$

$$\text{PED}_X + \text{PED}_M > 1$$

If the Marshall-Lerner Condition is met:

- A depreciation in a nation's currency will lead to an improvement in the current account
    - This can correct a current account deficit
- An appreciation in a nation's currency will lead to a worsening of the current account
    - This can correct a current account surplus.

Level7 Education

The Marshall-Lerner Condition (HL only)

If $\mathrm{PED_X} + \mathrm{PED_M} = 1$, a change in the value of a currency will not affect the current account balance.

If $\mathrm{PED_X} + \mathrm{PED_M} < 1$:

- A depreciation in a nation's currency will lead to a worsening in the current account
- An appreciation in a nation's currency will lead to an improvement of the current account.

Level7 Education

The Marshall-Lerner Condition and the J-curve Effect (HL only)

The main determinants of PED are habits, income, necessity, time, and substitutes.

As demand is often price inelastic in the short run, a corrective action will exacerbate an imbalance in the current account.

However, in the long run, as demand becomes more elastic, a corrective action will correct this imbalance.

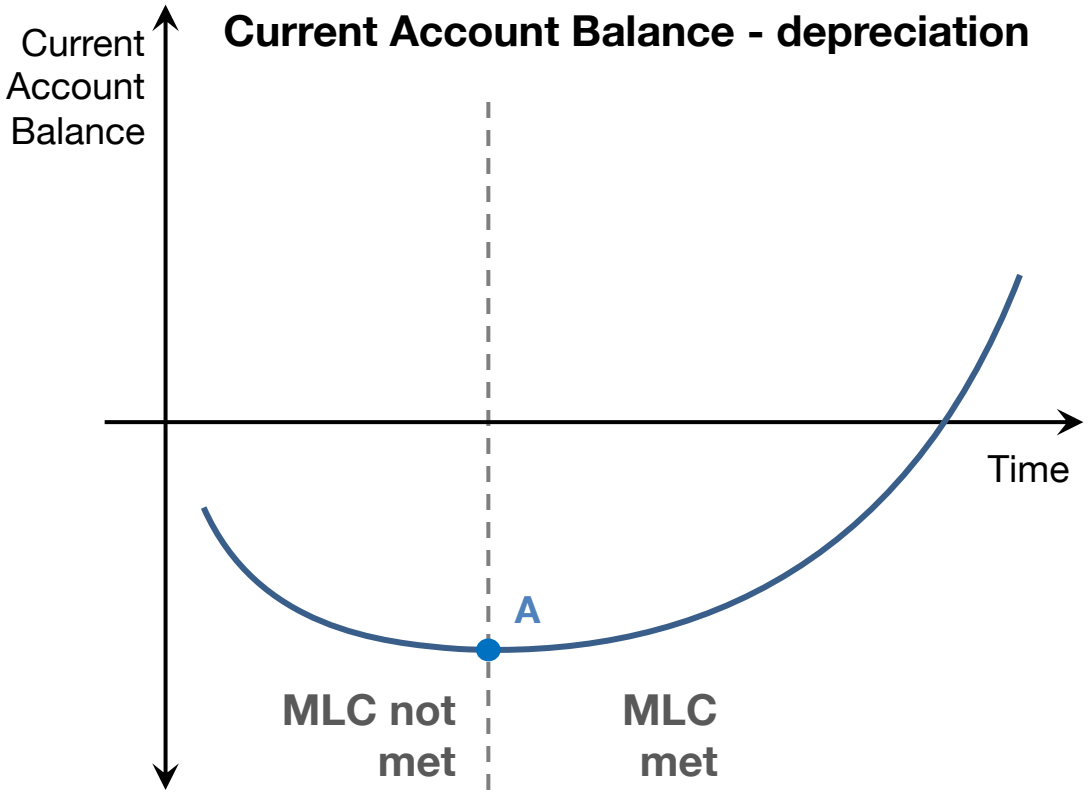
Level7 Education

J-curve Effect – current account deficit (HL only)

Following a depreciation in a nation's currency:

- Before point A, $\mathrm{PED_X} + \mathrm{PED_M} < 1$, worsening the current account deficit
- After point A, $\mathrm{PED_X} + \mathrm{PED_M} > 1$, correcting the current account deficit

This effect is known as the **J-curve effect** as the current account balance resembles the letter 'J'.

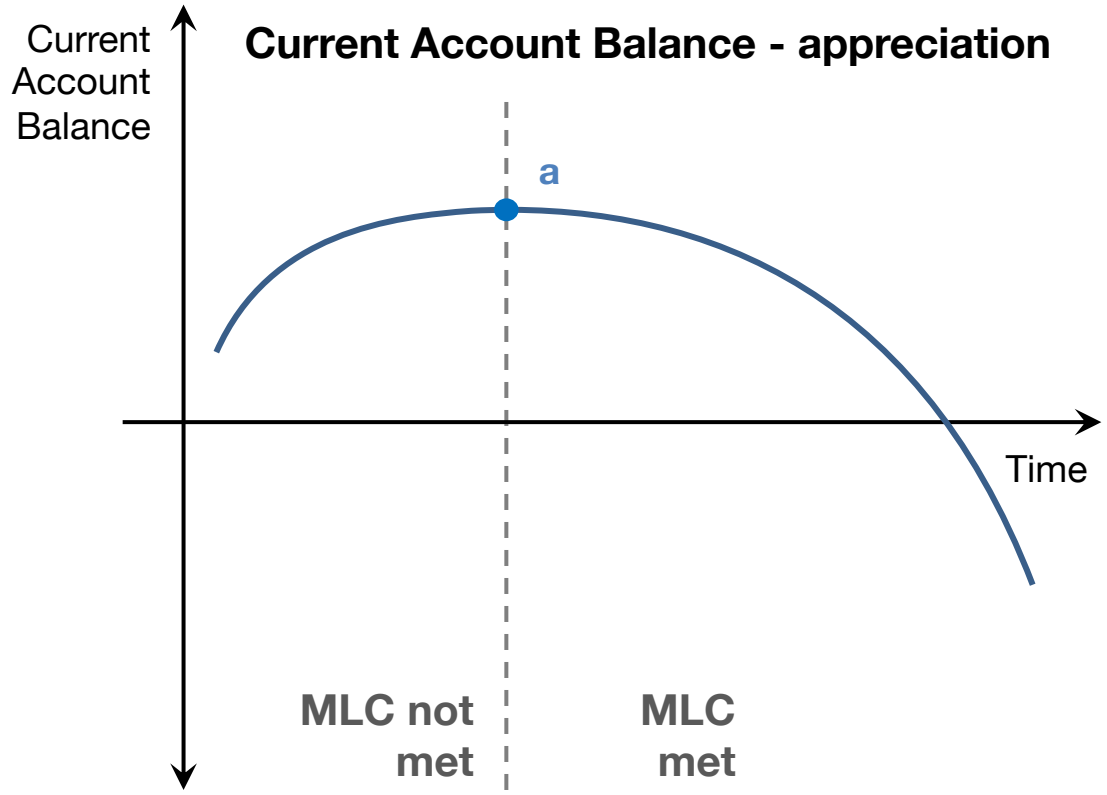


J-curve Effect – current account surplus (HL only)

Following an appreciation in a nation's currency to correct a surplus:

- Before point A, $\mathrm{PED_X} + \mathrm{PED_M} < 1$, increasing the current account surplus
- After point A, $\mathrm{PED_X} + \mathrm{PED_M} > 1$, correcting the current account surplus

Here, the current account balance resembles an upside-down letter 'J'.



Test your knowledge on this unit: Kahoot!

Level7 Education