

THE GLOBAL ECONOMY

You should know about:

- ✓ the benefits of international trade
- types of trade protection
- arguments for and against trade control or protection
- ✓ economic integration
- ✓ exchange rates

- ✓ balance of payments
- sustainable development
- measuring development
- barriers to economic growth and/or economic development
- economic growth and/or economics development strategies.

4.1 THE BENEFITS OF INTERNATIONAL TRADE

This sub-unit introduces key terms, ideas and principles associated with international trade.

You should be able to:

- ✓ define the term
 - \checkmark free trade
- explain the benefits of free trade
- ✓ illustrate the quantity of exports or imports on a trade diagram.

HL In addition to the points above, for HL you should be able to:

- define the terms
 - absolute advantage

- comparative advantage
- calculate the quantity of exports or imports and export revenue or import expenditure on a trade diagram
- distinguish between "absolute advantage" and "comparative advantage"
- explain the sources of comparative advantage
- illustrate comparative advantage on a PPC diagram
- calculate opportunity costs to identify a country's comparative advantage
- discuss the limitations of the theory of comparative advantage with the aid of real-world examples.

Summary

Free trade refers to international exchange of goods and services that takes place without any government imposed barriers (e.g. tariffs, quotas or subsidies).

There are many benefits of free trade.

- It results in increased **competition** between domestic and foreign firms, which leads to **lower prices**, innovation and greater **efficiency in production**.
- It allows greater choice for consumers, who are no longer limited to domestic goods and services.
- Firms may **acquire resources (factors of production)** that may not be available locally or may be more expensive when purchased from domestic producers.

- Firms may enjoy economies of scale when they export goods and services to larger markets.
- Foreign exchange is earned from the sale of exports, which importing firms can use to finance imports.
- A **more efficient world resource allocation** results as countries specialize in goods and services they can produce more efficiently.

HL A country has an **absolute advantage** in the production of a good (or service) when it can be produced using fewer resources (factors of production) than another country. For example, Country B has the absolute advantage in the production of good X if it can produce it using 3 units of labour, whereas Country A must use 5 units of labour. So, Country B produces good X at a lower absolute cost.

A country has a **comparative advantage** in the production of a good (or service) when it can be produced at a *lower opportunity cost* than in another country. For example, Country B has a comparative advantage in the production of good X if producing an unit of X requires the sacrifice of 10 units of good Y whereas Country A must sacrifice 12 units of good Y. Country B can produce good X at a lower relative cost.

The following are the main **sources of comparative advantage**.

- The quantity and quality of resources (factors of production) —fertile land allows for higher productivity in the production of agricultural goods or a highly educated and trained labour force allows for more efficient production of knowledge-based goods.
- **Differences in technology**—greater access to capital goods and the latest technology allow for more efficient production of manufactured goods.

Some of the **limitations of the theory of comparative advantage** are as follows.

 Resources (factors of production) are not perfectly mobile—the principle of specialization is based on the assumption that resources are occupationally and geographically mobile but labour, for example, is often highly specialized or unable to relocate.

- **Opportunity costs may not be constant** (the PPC may not be a straight line but rather bow outward). Transferring resources from one industry to another may be increasingly costly.
- The assumption that all firms operate in a perfectly competitive market producing homogeneous goods is not realistic. In reality, large firms that enjoy market power and economies of scale dominate world trade. Goods are seldom perceived as homogeneous by consumers.

Transportation costs may outweigh gains from exporting a good.

- **Excessive specialization** may expose a country to fluctuation in economic activity in the event of changes in world demand.
- Specialization may **impede structural change** and hence economic development for developing countries, which often have a comparative advantage in the production of agricultural goods.
- Governments may create a comparative advantage in an industry by investing in human and physical capital. For example, introducing IT courses in schools and investment in high-speed internet infrastructure may lead to a comparative advantage in IT-related industries.

QUESTION PRACTICE

This question is adapted from the May 2019 examination paper.

The market for oranges in Country Z is illustrated below.



▲ The candidate understands that the country is a net exporter as the world price is above the domestic price, and shows workings.

▼ Unfortunately, the candidate has not considered the unit provided on the horizontal axis. The correct answer is 100 **thousand** (100,000).

▲ Although the quantity of exports is incorrect, the working allows the examiner to award 1 mark for a correct understanding of the concept of export revenue.

Assessment tip

Do not forget to label the world supply curve or world price line. A trade diagram is not fully labelled if the "S(world)" or "World price" label is missing. SAMPLE STUDENT ANSWER

quantity of exports = 150 - 50 = 100

export revenue = \$3 × 100 = \$300

This response could have achieved 1/2 marks.

QUESTION PRACTICE

This question is adapted from the May 2018 examination paper.

The following diagram illustrates the production possibilities of two countries, Country A and Country B, in the production of cotton and bananas.

[2]

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Using information provided in the diagram to support your answer, determine which country should specialize in the production of cotton. [2]

4.1 THE BENEFITS OF INTERNATIONAL TRADE

SAMPLE STUDENT ANSWER

- Country B should specialize in the production of cotton since (it faces a lower opportunity cost.
- Country A's opportunity cost of producing a tonne of cotton
- is $\frac{8}{3}$ tonnes of bananas while country B's opportunity cost of
- producing a tonne of cotton is 1 tonne of bananas.

▲ The candidate correctly identifies the lower opportunity cost as the justification for comparative advantage.

▲ Information from the diagram is used to support the answer.

This response could have achieved 2/2 marks.

📏 Revision tip

- The opportunity cost of producing the good on the horizontal axis is the slope of the PF
- The country with the flatter PPC has a comparative advantage in the good on the horizontal axis (in the diagram, Country A has a comparative advantage in the production of bananas).
- Once you have calculated the opportunity cost of producing a unit of one of the goods for a country, the opportunity cost of producing the other good is just the inverse (Country A's opportunity cost of producing a tonne of bananas is $\frac{3}{8}$ tonnes of cotton).

QUESTION PRACTICE

This question is adapted from the May 2017 examination paper

Explain two limitations of the theory of comparative advantage.

SAMPLE STUDENT ANSWER

Response 1

Transport costs exist.

It would also mean that the country would not enjoy economic

development.

This response could have achieved 1/4 marks.

Response 2

- Some of the assumptions of the theory of comparative advantage may not hold in the real world. One such assumption is that there is no transportation cost involved. In real life, a country might prefer not to import from a country with a comparative advantage because the difference in cost might be less than the
- transport costs incurred in getting the item delivered across countries.

▼ The candidate is **listing** and not **explaining** the limitations. There are 2 marks allocated for **each** limitation. Listing a point without explanation is usually only awarded 1 mark.

▼ This answer is too vague. It would not be awarded a mark. There are many barriers to economic development that are not related to comparative advantage.

▲ This clearly explains an assumption of the theory that may not hold in the real world—that transportation costs could offset any potential cost-reduction from comparative advantage.

▼ The lack of incentive for structural change in developing countries is a valid example. This part of the answer is more precise than the previous answer. However, the point is not adequately linked to the theory of comparative advantage so only 1 mark would be awarded for this paragraph. To achieve 2 marks, the candidate should have explained that most developing countries have a comparative advantage in agricultural goods.

The application of comparative advantage may not bring about the benefits inherent in the theory. In particular, developing countries may not pursue structural change needed for economic development.

This response could have achieved 3/4 marks.

Revision tip

subsidies and export subsidies

Discussion topics may be tested as part (b) of essay questions (paper 1), which candidates need to illustrate with real-world examples. There's one discussion topic for this unit—the limitations of the theory of comparative advantage. Consider researching countries that may not benefit from specialization according to their comparative advantage. Build up your own list of real-world examples.

4.2 TYPES OF TRADE PROTECTION

You should be able to:

- ✓ define the terms
 - ✓ trade protection
 - 🖌 quota
- administrative barriers
 discuss the effects of a tariff, quota, subsidy or export subsidy, or administrative barriers on markets and stakeholders with the aid of

tari

real-world examples
illustrate the effects of a tariff, quota or subsidy or export subsidy on price, production, consumption, expenditures, revenues and

This sub-unit introduces key terms, ideas and principles associated with trade protection.

HL In addition, for HL you should be able to:

welfare on a trade diagram.

calculate with reference to a trade diagram, in cases where there are changes in tariff, quota or subsidy or export subsidy, the changes in

- the quantity of exports or imports
- export revenue or import expenditure
- government revenue or spending
- consumer and producer surpluses
- welfare loss.

Summary

Trade protection refers to government policies that limit imports and/or encourage exports by setting up trade barriers.

These are the main types of trade barriers.

- A **tariff** is a duty (tax) that is placed upon imports. Tariffs serve the purposes of protecting domestic industries from foreign competition and raising revenue for the government.
- A **quota** sets a limit on the quantity of a good that can be imported.
- A **subsidy** is an amount of money paid by the government to firms to lower costs of production. Subsidies give domestic firms an advantage over foreign competition. Subsidies may be given to firms competing with imports in the domestic market. Export subsidies are given to exporting firms to increase their revenue from sales in foreign markets.
- Administrative barriers are the legal barriers (e.g. technical standards, health and safety requirements, environmental standards) that make it difficult and costly to import goods.

Trade protection always benefits domestic producers and leads to inefficiency (welfare loss). The effects on consumers and the government depend on the type of trade protection.

	Impacts on consumers, governments and foreign producers				
Tariff	Consumers: higher price, lower level of consumption and hence lower consumer surplus				
	Government: tax revenue collected				
	Foreign producers: lower export revenue				
Quota	Consumers: higher price, lower level of consumption and hence lower consumer surplus				
	Government and foreign producers: impacts depend on the quota system. Governments may auction				
	licenses to export, raising government revenue—this system involves a cost for foreign firms. When				
	governments do not charge foreign firms for the right to export, foreign firms will charge a higher price,				
	enjoying higher export revenues.				
Subsidy	Consumers: no change in price, level of consumption or consumer surplus				
	Government: spending incurred				
	Foreign producers: lower export revenue				
Export subsidy	Consumers: higher price, lower level of consumption and hence lower consumer surplus				
	Government: spending incurred				
	Foreign producers: lower revenue				

QUESTION PRACTIC

This question is adapted from the November 2021 examination paper.	
Using a tariff diagram, explain the likely effect on consumer surplus of a	
25% tariff on all wooden furniture imported into the US. [4]]

Test yourself

Practise drawing trade diagrams to illustrate the effects of tariffs, quotas and subsidies. Look for real-world examples of each type of trade protection. 





Tariff is a form of trade protection and is indirect tax on imported goods. Due to tariff, the price of wooden furniture increases from Pw to Pw + t. The quantity of domestic production of wooden furniture increases from Q1 to Q3, and the quantity of import decreases from Q1Q2 to Q3Q4. Therefore, the quantity that consumer buys decreases from Q2 to Q4. Hence, consumers are worse off and consumer surplus decreases. Consumer surplus is defined as the benefit for people who buy at lower price than that they are willing to pay for. The loss of consumer surplus is shown by the shaded area, as price increases from Pw to Pw + t, and quantity decreases.

This response could have achieved 4/4 marks

QUESTION PRACTICE

This question is adapted from the November 2020 examination paper. Country B grants rice producers an export subsidy of \$2 per kilogram of rice.



▲ Unlike the previous two diagrams, this one does not illustrate the original consumer surplus (before the imposition of the tariff) but it does show the reduction in consumer surplus (shaded area). This approach is valid as it illustrates the effect of the tariff on the consumer surplus, answering the question. The response also clearly states that the higher price and lower quantity demanded would imply a reduction in the consumer surplus.

Assessment tip

For many questions you need to calculate or identify an area on a diagram (consumer surplus, welfare loss, for example). Responses 2 and 3 looked at the original and new consumer surpluses to determine the change. Response 3 went for a more "direct approach" by identifying the change (the shaded trapezium). Illustrating the area by shading worked well for response 3 as the candidate focused on a single area.

However, shading may make it hard to read a diagram if there are multiple areas identified, as was the case for responses 1 and 2. The annotations for those responses clearly identified the areas in the explanations.

Similarly, a change in consumer surplus can be calculated by subtracting the new consumer surplus (triangle AED in response 2) from the old consumer surplus (area AFC) **or** the change can be directly calculated from the diagram (the shaded trapezium in response 3) but attention must be paid to include the correct sign as it reflects whether the consumer surplus increased or decreased. Which approach works best for you?

SAMPLE STUDENT ANSWER

▲ The candidate identifies the correct areas and notes that the quantities are in millions.

● 0.5 × (2 × 2) + 0.5 × (3 × 2) = \$5 million

This response could have achieved 2/2 marks.

>> Assessment tip

The previous question asked you to calculate but not identify the welfare loss associated with the export subsidy on the diagram. Even if it is not a requirement of the question, shading the welfare loss or identifying the changes in quantities demanded and supplied on the diagram might make it easier for you to calculate the welfare loss and avoid missing or miscalculating an area.

Going back to the previous diagram, let's identify the welfare loss and domestic quantities demanded and supplied.



QUESTION PRACTICE

Using real-world examples, discuss the impact of tariffs on markets and stakeholders. [15]

MPLE STUDENT ANSWER

▲ The candidate introduces the purpose of a tariff. Some understanding of the term "stakeholders" is demonstrated.

- A type of trade protection, a tariff is a tax that is placed on
- imports. It serves the purposes of protecting domestic industries
- from foreign competition and raising revenue for the
- government. Tariffs will directly impact the consumers and
- producers of goods on which they are imposed and may also
- impact other stakeholders indirectly especially if the tariff leads to retaliation by trading partners.



As can be seen in Figure 1, a 25% tariff imposed by the United States in 2018 on imported steel leads to a higher price of steel on the US market, from Pw to Pw1. This would lead to a lower quantity of steel consumed by US consumers, from Q4 to Q3 as fewer consumers are willing and able to consume at the higher price. The consumer surplus is reduced by area PWICDP Steel factories in the US would benefit as they produce a higher quantity, Q2 instead of Q1, since some firms which were previously unwilling or able to produce at price Pw are now willing and able to produce steel. They receive a higher revenue of OPW1CQ3 instead of OPWAQ1. The producer surplus is also increased by area PWABPWI. The US government also benefits through the collection of the tariff revenue, which can be used to reduce their budget deficit. From this diagram analysis, it is clear that domestic producers and the government benefit from the tariff, while consumers are disadvantaged.

To increase production from Q1 to Q2, the domestic producers will need to hire more workers, and this would lead to lower unemployment. In the case of US steel, the tariff would lead to a significant decrease in structural unemployment since this industry is labour-intensive. The higher revenue earned by producers would also allow them to pay higher wages to the workers and this could lead to higher economic well-being. ▲ The tariff diagram is included and explained with adequate reference to the diagram.

The candidate could have shown on the diagram the tariff revenue and the impact on foreign producers.

▲ The candidate elaborates on the impact of tariffs on producers and related stakeholders such as employees.

▼ There is an interesting comment about the type of unemployment that is reduced, but the candidate does not explain it sufficiently.



▲ The candidate shows awareness of the demand of the question set by the command term—"discuss"—by providing a balanced view on the impact on firms in the USA.

▼ Examples could be used more effectively, for example by naming the affected car, canned food or motorbike producers.

A Here the candidate makes better use of real-world examples. The numbers quoted are not exact ("about 15%", "over 130%") but they are sufficient to show a good knowledge of the issue.

There is also evidence of evaluation and synthesis in this conclusion.

Some imported goods (such as steel) are also used by other firms as factors of production, the tariffs may therefore lead to higher costs of production for firms. This can be seen in Figure 2 where the supply changes from S1 to S2. Going back to our example of the 25% tariff on steel imported into the US, firms producing canned food and cars use steel and would have to pass on the higher cost of production to the consumers through higher prices (from P1 to P2 on Figure 2).

Tariffs may also lead to retaliation when trading partners also impose tariffs on US exports. This happened as a result of the US imposing tariffs on steel and other products in 2018. A series of trade wars with the EU and China led to the increase in the tariffs imposed on US-made motorbikes, for example. This means that while the producers of steel benefit from the tariffs, the motorbike makers will be disadvantaged.

The extent of the impact on consumers and producers will depend on varying factors such as the value of the tariff. the type of industry and how easily the imported good can be substituted with domestic production. For example, the united States imposes tariffs on steel, peanuts and wool sweaters, among other goods. However, the tariff on wool sweaters is only about 15% and may not have a large impact on branded sweaters whose demand can be quite price-inelastic since consumers may show some brand loyalty and not want to buy US-made sweaters if they feel the quality is inferior to foreign sweaters. The tariff on peanuts is over 130% and would make imported peanuts more than twice the price of foreign peanuts and this would make consumers more likely to switch to local peanuts due to the significant increase in price. Finally, the US tariff on steel is 25%. While it is only slightly more than the tariff on wool sweaters, it will have a much larger impact on domestic producers because steel is a rather homogeneous product so US consumers (the US firms that require steel as factor of production) will be more willing to switch to local steel. So, it is clear that the tariff will only benefit firms who are protected by the tariff if they can easily increase production and offer products of similar or better quality to imported ones. The tariffs will disadvantage firms who need to pay for the tariff on imported factors of production and those who face the consequences of retaliation by trading partners.

This response meets all the descriptors in the second highest mark band (10-12) and **could achieve 12/15 marks**. To reach mark band 13-15, the candidate should discuss further the impact on consumers and/or foreign producers rather than focus so much on one stakeholder (the domestic producers).

Refer to Unit 5 (pages 194–195) for a full explanation of the paper 1 level descriptors.

Concept link

- Intervention—trade protection is a form of government intervention. The government becomes involved in the workings of markets (free trade takes place in free markets) with the aim of achieving important macroeconomic and societal goals. Can you identify the costs and benefits of intervention through trade protection in your chosen article? You may also consider some of the points learned in sub-unit 4.1, as the benefits of free trade offer possible drawbacks of intervention. The benefits of free trade that a country forgoes by opting for trade protection are the opportunity cost of trade protection.
- Efficiency—if the article provides insights into wastages of scarce resources (e.g. lack of scope for economies of scale, no incentive for technological improvement) then you could also consider efficiency as key concept for your commentary.

🕄 Content link

Link to your IA

You may choose an article on trade protection for your third commentary. If so, you will likely draw a diagram to illustrate the effects of the trade protection(s) mentioned in the article. Keep in mind that trade protection diagrams come with a lot of information—quantities produced and consumed domestically, quantities imported/exported, different types of expenditures and revenues as well as the resulting welfare losses. Focus on what is relevant to your article. Presenting a lengthy, generic diagram analysis may result in a lower mark on criterion C: Application and analysis).

4.3 ARGUMENTS FOR AND AGAINST TRADE CONTROL OR PROTECTION

This sub-unit builds on subunits 4.1 and 4.2 and reviews the arguments for and against trade control or protection.

You should be able to:

- explain the arguments for and against trade protection with the aid of real-world examples
- evaluate trade policies (trade protection and free trade) for a given country

Content link

Link to other sub-units

Refer to sub-unit 3.3. Industrial jobs may be lost due to lower cost imports. This is represented on a diagram by a fall in the demand for labour for a particular country.

Summary

These are the main arguments for trade protection.

- It can **protect or create local jobs** and in particular **prevent or reduce structural unemployment** if the workers' skills are not transferrable to other industries.
- Trade protection can **correct a trade (current account) deficit on the balance of payments (see** sub-unit 4.6 on expenditure switching policies to reduce a persistent current account deficit).
- Domestic producers are protected from **unfair practices** such as **dumping** (the sale of goods at a price below the cost of production or below the price charged in the home market).
- A country's **strategic industries** are protected and its continued access to goods such as staples, steel and weapons is ensured. This is also known as the **national security** argument.
 - Tariffs raise **government revenue.** There are often high tariffs on luxury goods in economically least developed countries (ELDCs).

Trade protection encourages **diversification** of economic activities, by preventing specialization in agricultural goods in ELDCs.

- It protects new domestic industries, known as **infant (sunrise) industries** that lack the efficiency and economies of scale of established foreign competitors. This is often used to justify trade protection in ELDCs.
- The sale of goods that may not meet the **health and safety** standards of the importing nation is prevented.
- Production of goods is reduced in countries with lower environmental standards that may pose a threat to sustainability.

The reasons governments give to justify trade protection must be carefully evaluated. Trade protection is popular with industries competing with imports and governments may hide populist policies behind unfounded economic claims. Accusations of dumping may be unfounded (dumping can be hard to prove) and countries imposing trade protection on goods that do not meet environmental standards are sometimes those with poor records of environmental protection.

These are the main arguments **against** trade protection.

- Consumers pay **higher prices** and face **fewer choices** if they are unable to afford the higher-priced imports.
- Trade barriers may lead to **retaliation** and start a **trade war**.

- Trade protection leads to **misallocation of resources** as goods are not produced by countries that use the fewest resources to produce them (efficiency in production).
- Domestic firms may pay **higher costs** if they import factors of production. This may affect **export competitiveness** if exporting firms are reliant on imported resources.
- Domestic firms may lack incentive to become more efficient.

Test yourself

Proton Holdings Berhad (Proton for short) was established in 1985 in Malaysia to produce the developing country's first national car. Identified as an infant industry, Proton benefited from protection from foreign competition as Malaysia imposed tariffs as high as 300% on imported cars. Since its foundation the company also received a total of USD 3 billion in subsidies from the government. "It is a national car industry, It's not just about a car. It's about engineering. A country without engineering skill and knowledge will never become a developed country," commented the Prime Minister of Malaysia.

In the beginning, Proton was reliant on imported factors of production such as car chassis made by Mitsubishi Motors. Proton gained the technological knowledge to train workers to build cars entirely in their Malaysian factories after 15 years. In 1993, Proton cars accounted for 74% of all new cars sold in Malaysia. In 2016, a decade after the government reduced tariffs on imported cars as part of its participation in a Southeast Asian free-trade pact, Proton cars only accounted for 12.5% of new car sales in Malaysia.

Adapted from https://www.livemint.com/Industry/WfScncX72isx6B6GPCW0GL/Malaysia-eyes-sale-of-Protonas-Mahathir-Mohamads-auto-drea.html

Read the above passage and identify at least **two arguments for** and **two arguments against** imposing tariffs on foreign cars in Malaysia.

Hint: consider the size of the tariff (as high as 300%)—would such a tariff help raise government revenue? Would it lead to a significant increase in prices for consumers? Keep in mind that the passage introduced Malaysia as a developing country. Are some of the common arguments for trade protection in ELDCs applicable?

Research other cases of infant industries. Tru to find a least one industry that is now established and no longer needs protection from foreign competition (a success story). This would be a good real-world example to illustrate a part (b) essay question on this topic.

>> Assessment tip

Diagrams are very important in economics. The highest mark bands for the 15-mark questions in papers 1 and 2 stress the importance of diagrams—*Where appropriate, relevant diagram(s) are included and fully explained*. Note that diagrams need to be included **and fully explained** or what examiners sometimes call *effective use of diagrams*.

What does it mean to use diagrams effectively? Diagrams are meant to illustrate your arguments to convince the examiner that your point is anchored in economic theory. Your diagrams must be woven into your answers. Link the diagrams learned in sub-units 4.1 and 4.2 to the arguments for and against trade protection (where appropriate). For example, explain the argument of higher prices for consumer with reference to the *higher price on a tariff or quota diagram*. The *higher quantity supplied by domestic producers* can support the argument for *job creation*. The *welfare loss* is evidence of the misallocation of resources.

QUESTION PRACTICE

This question is adapted from the May 2012 examination paper.

Using real-world examples, discuss the view that it is never desirable for countries to resort to trade protection. [15]

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SAMPLE STUDENT ANSWER

▲ This shows good understanding of the key concept, trade protection. Trade protection is defined as the partial or complete protection of domestic industries from foreign competition in domestic markets. There are many types of trade protection such as tariffs, quotas and subsidies, and regulatory barriers. Trade protection, although aimed at benefitting domestic industries, may bring about numerous harms. For example, the US imposed a series of tariffs on Chinese imports from 2018 to 2019, such as a steel and aluminium tariff in February 2018.

Schina + tariff

► Quantíty of steel

and alumíníum

Price of steel and aluminium

AP2

DI

▲ The candidate has included a diagram and has customized the labels to the real-world example (e.g. "S(China)" instead of "S(World)"; "Price of steel and aluminium" instead of just "Price".

▲ A full explanation of the diagram is included.

Díagram 1

with the tariff, the prices of steel and aluminium in the U.S. rises from P1 to P2, shifting the Chinese supply curve upwards from S(China) to S(China) + tariff (Diagram 1). At the higher price, more US domestic producers are willing and able to supply steel and aluminium, increasing quantity supplied by Q1Q2. U.S consumers are less incentivised to purchase at the higher price P2, causing quantity demanded to fall by Q3Q4. Thus the volume of imported steel and aluminium reduces from Q1Q4 to Q2Q3. Tariffs result in a loss of consumer surplus of areas A + B + C + D as domestic consumers consume less of the good at a higher price P2. While domestic producer surplus increases by area A as total revenue increase from (P1 \times Q1) to (P2 \times Q2) and the government earns tariff revenue equivalent to area C, society suffers a net welfare loss of areas B + D of consumption in efficiency is represented by area D which is a loss of consumer surplus. Area B represents production inefficiency due to the extra cost paid as the U.S economy shifts steel and aluminium purchases away from efficient foreign producers to relatively inefficient domestic firms.

4.3 ARGUMENTS FOR AND AGAINST TRADE CONTROL OR PROTECTION

Thus trade protectionism almost always guarantees a reduction in efficiency, especially production inefficiency which results in global resource misallocation. In addition, tariffs on Chinese steel and aluminium may breed dependency on such protection in domestic producers, reducing their incentive to innovate, lower costs and operate efficiently. Long-run efficiency thus declines as competition is effectively reduced.

Trade protection also increases the probability of a trade war occurring, where protectionism results in retaliatory protectionist measures imposed by the other country. For example, China retaliated to the tariffs set by the US by imposing higher tariffs on US soy and automobile exports in 2019. As both countries became increasingly protectionist, there was a significant reduction in the volume of trade between them, reducing the gains from free trade. Since export earnings are an injection into the global circular flow of income, and especially given that

both US and China are large global economies, there may be a significant impact on world trade. With increased instability and volatility, long-term growth and investment is hindered.

However, trade protection may bring about desirable benefits in some circumstances. For example, Ecuador imposed new regulatory barriers on imported goods such as cereals in 2013, in the form of quality control measures and import licensing. It also increased tariffs on raw materials and capital equipment which are also produced in Ecuador. Such measures were aimed at protecting infant industries, new domestic industries that have not had time to establish themselves and achieve production efficiencies and may therefore be unable to compete with mature foreign industries.

By reducing the volume of imports such as through tariffs as in Diagram 1 (@1@4 to @2@3), competition is reduced, allowing infant industries to increase market share and efficiencies. Such policies may be especially necessary for developing countries such as Ecuador to expand production into new industries that give them a comparative advantage, allowing for long-term economic growth and development. For example, if Ecuador grows its cereal export industry, export earnings may increase, increasing net ▲ The candidate continues to make use of the diagram to support the argument that trade protection is not desirable.

▼ There is a real-world example but it is not fully developed. Who are the consumers of steel and aluminium? What is the impact of the higher prices for them in particular? The candidate could have mentioned US companies that use the metals in production; their goods will become more expensive.

▲ This judgement demonstrates the candidate's ability to evaluate the argument—that trade protection might have more significant impacts for some countries.

▲ The candidate is meeting the requirements set by the command term ("discuss") by providing a counter-argument to the proposition that trade protection is never desirable.

A real-world example is developed. References to the tariff and AD/AS diagrams help support the analysis. ▲ There is a clear attempt at synthesis, which summarizes some of the key points raised in the essay.

exports (X-M) and thus AD from ADI to AD2 (Diagram 2). Real GDP increases from Y1 to Y2, causing actual growth. If economic growth is sustained or industries gain more funds from profits, investment in physical and human capital may increase, increasing Keynesian AS from Keynesian AS1 to Keynesian AS2; potential output increases to Y4 while real GDP increases to Y3, allowing both short-term and long-term growth.

General price level

Keynesían AS1

Keynesíav

Real GDI

Díagram 2

In conclusion, trade protection is often deemed undesirable because of its negative implications for parties involved, not only the country on which protectionism is imposed but also the domestic economy of the country imposing trade protection. Negative repercussions also extend to countries not directly involved, having global implications. However, a country's context may decide whether the benefits of protection can outweigh its harms. Especially in economically less developed countries, trade protection may be necessary in the short-term to grow infant industries and its economy. Hence, countries may find it desirable to resort to trade protections at times, but must do so with caution.

This **response could achieve 13/15 marks**. It meets all of the descriptors for the highest mark band (13-15). However, the real-world examples are not always well developed to support the arguments.

Assessment tip

Pay attention to the command term. "Discuss" was the command term of this question practice. A discussion needs to be balanced. In the question, the balance comes in the form of considering arguments that support the idea that trade protection is not desirable, but also considering the opposite view—that trade protection can be desirable. An unbalanced answer to a discussion question would probably receive a lower mark as it would not meet the first descriptor of the highest mark bands—the specific demands of the question (which are partly determined by the command term) would not be addressed.

🕄 Content link

Link to your IA

Trade protection is covered extensively in the news and so candidates often opt for this topic for their third commentary. A good article would point to the reasons that pushed the government to impose the trade barrier. For example, a mention of job losses could signal the fear of structural unemployment; a difficulty to compete with imports from more established firms could indicate an infant (sunrise) industry that needs time to grow; a depreciating currency is often the symptom of a high current account deficit. Also pay attention to other information given in the article that could provide arguments against the implementation of trade barriers. For example, a mention of rising inflation would suggest that consumers' real income would be significantly affected by higher prices of imports. Explaining those arguments in favour and against trade protection in economic terms and with reference to the contents of the article is important (criterion C: Application and analysis) but it is important to assess the validity of the arguments in context (criterion E: Evaluation).

South Africa imposed tariffs on imported chicken meat in 2020, for example. Would the infant industry argument make a valid reason to support the tariff? Could chicken farmers be part of a new industry in South Africa?

Concept link

As mentioned in sub-unit 4.2, a commentary that allows for some debate on free trade versus trade protection may illustrate the key concepts of efficiency and intervention. Here is another key concept you may consider.

Interdependence—the focus of the article may be the impacts of trade protection on trading partners, especially in terms of lower income, unemployment and the risk of retaliation. Such an article would allow you to explore the interdependence of nations in a globalized world.

ECONOMIC INTEGRATION 4.4

You should be able to:

- define the terms
 - ✓ preferential trade agreements
- customs unions
- common markets
- ✓ free trade areas or agreements
- monetary union
- explain the arguments for and against joining a trading bloc
- evaluate a country's decision to join a trading bloc
- explain the objectives and functions of the World Trade Organization (WTO) and the common criticism of the WTO.

FL In addition to the points above, for HL you should be able to:

- define the terms
 - trade creation
- trade diversion
- evaluate a country's decision to join a monetary union.

Summary

Economic integration refers to the process by which two or more countries cooperate on economic and other matters. The most common form of economic integration is a **preferential trade agreement** (PTA).

This sub-unit introduces the different types of trading blocs. A PTA is a trading bloc that encourages **trade liberalization** (the process of reducing trade barriers) by giving member countries preferential access to certain goods and services (e.g. through reduced tariffs).

PTAs may be **bilateral** (between two countries), **regional** (between many countries) or **multilateral** (agreed through the WTO) agreements.

The degree of economic integration varies with the type of PTA or trading bloc.

- A free trade area or agreement is the lowest form of economic integration—where member countries reduce or remove trade barriers against each other. Each country keeps its own trade policies with countries outside the free trade area or agreement.
- A **customs union** is an agreement between countries to reduce or remove trade barriers and adopt common external barriers against non-member countries.
- A **common market** is the highest form of economic integration member countries agree to reduce or remove trade barriers, adopt common external trade barriers and permit free movement of capital and labour. In addition, members may adopt common policies on product regulation.

In addition to the benefits of free trade (see sub-unit 4.1), the advantages of joining a trade bloc include the following.

- (HL) When trade barriers are reduced, goods that were previously produced domestically will now be imported from producers who can produce them more efficiently (at a lower cost). This situation is known as **trade creation**.
- Membership in a trading bloc may allow for **stronger bargaining power in** multilateral negotiations. As a common market, the European Union (EU) has signed economic agreements with some of the largest economic markets, which individual EU member states may not be able to negotiate on their own. For example, the EU-China Comprehensive Agreement on Investment (CAI) "grants EU investors a greater level of access to China's market" (https://ec.europa.eu/trade/policy/in-focus/eu-chinaagreement/).
- There is greater political stability and cooperation within the trading bloc as countries become more interdependent.
- With permitting free movement of labour, there are greater employment opportunities for residents of a common market.

In addition to the arguments for trade protection (see sub-unit 4.3), membership to a trading bloc may also lead to:

- (HL) **trade diversion**, a situation where a member country of a trade bloc no longer imports goods from a more efficient (lower cost) producer outside the trading bloc and instead imports them from a less efficient producer within the trading bloc
- a **loss of sovereignty** as economic decisions may no longer be taken independently, especially in customs unions and common markets where countries adopt common trade and other economic policies
- a reduction in the incentive to participate in multilateral trading negotiations through the WTO.

HL A trading bloc may further integrate economic activities as a **monetary union** where member countries share the same currency and have a common central bank.

Besides the advantages of a trading bloc, members of a monetary union may also benefit from:

- the elimination of exchange rate conversion costs and risk associated with exchange rate fluctuations
- greater **inflows of foreign direct investment** due to the greater stability resulting from the lower currency risk.

Members of a monetary union may also suffer a **loss of independence in implementing monetary and exchange rate policy**.

The WTO is a multilateral organization seeking to liberalize trade. The functions of the WTO are to:

- set and enforce rules for international trade
- provide a forum for negotiating trade liberalization
- monitor further trade liberalization
- resolve trade disputes
- increase the transparency of decision-making processes
- cooperate with other major international economic institutions involved in global economic management to help developing countries benefit fully from the global trading system.

The WTO has faced many **difficulties in reaching agreements on services and primary products**. Developing countries often denounce the policies of the WTO that they feel **benefit developed countries more than developing countries**.

Test yourself

A common central bank is shared by 19 members of the EU as part of a monetary union, the Eurozone. The European Central Bank is responsible for its monetary policy.

Table 4.4.1 Inflation and economic growth rates for selected Eurozone members (2018)

	Estonia	Greece	Germany	Poland	Spain	Eurozone average
Inflation (%)	3.44	0.63	1.73	1.81	1.68	1.70
Economic growth [%]	4.13	1.60	1.09	5.35	2.30	1.84

As you can see, inflation and growth rates vary across the Eurozone. Would you say all countries want the same monetary policy? As the President of the European Central Bank, would you adopt a contractionary or expansionary monetary policy?

>>> Assessment tip

The EU is the largest common market with 27 member countries. Croatia was the last country to join the EU in 2013 but other countries such as Serbia and Turkey are currently negotiating membership to the common market. Research the (potential) benefits and problems of an EU membership for those countries. Those could be good real-world examples for paper 1 questions.

QUESTION PRACTICE

This question is adapted from the November 2021 examination paper.List two functions of the World Trade Organization (WTO).[2]

SAMPLE STUDENT ANSWER

Response 1

To negotiate rules and to settle disputes.

This response would probably not be awarded a mark.

Response 2

▲ This response is a lot clearer. If you compare it to the previous response, here the candidate clearly states that the disputes are trade-related.

While it looks as if the

candidate has highlighted two functions of the WTO, they are

poorly expressed. What are the rules for? What kind of disputes

does the WTO help to resolve?

Settles trade disputes.
 Provides a forum for trade negotiations between countries.

This response could have achieved 2/2 marks.

4.5 EXCHANGE RATES

You should be able to:

- define the terms
 - ✓ exchange rate
 - ✓ fixed, floating and managed exchange rate
 - ✓ appreciation and depreciation
 - ✓ devaluation and revaluation
 - ✓ overvalued and undervalued exchange rates
- explain the reasons for a change in the demand of, or supply for, a currency
- illustrate changes in exchange rates on a diagram
- calculate changes in the value of a currency from a set of data
- discuss the consequences of a change in exchange rate on economic indicators with the aid of real-world examples
 - illustrate the impact of a change in exchange rate on an AD/AS diagram
 - **HL** In addition to the points above, for HL you should be able to:
 - evaluate a country's decision to change its exchange rate system.

Summary

An **exchange rate** is the price of a currency in terms of another currency.

Currencies are transacted ("exchanged") on the foreign exchange market. For example, residents of the UK who wish to visit France will need to exchange British pounds for euro since the British pound is not accepted by most hotels, restaurants and shops in France. That currency exchange is both a purchase and a sale.

This sub-unit introduces key terms, ideas and principles associated with exchange rates.

- British pounds are sold—this increases the supply for the British pound on the market for British pounds.
- Euro are purchased—demand for the euro increases on the market for euro.

The exchange rate, being a price, changes with the changes in market forces. In the above example, the exchange rate for the British pound decreases and the exchange rate for the euro increases.

There are three types of exchange rate system.

- The **floating exchange rate** system—the exchange rate is determined by market forces (the demand for, and supply of, the currency on the foreign exchange market) without government or central bank intervention.
- The **fixed exchange rate** system—the value of a currency is fixed, or pegged, to the value of another currency by the central bank. In this system, constant intervention is needed to counter changes in the exchange rate resulting from movements in the demand for, and/or supply of, the currency.
- The **managed exchange rate** system—the exchange rate is allowed to change within limits. In this system, regular intervention by the central bank is required to prevent excessive appreciation or depreciation.

Appreciation (**depreciation**) refers to the increase (decrease) in the value of a currency resulting from movements in market forces. These terms are used to refer to exchange rate changes in floating and managed exchange rate systems.

These are the main reasons for changes in the demand for, and supply of, a currency.

- Changes in the demand for exports and imports—for example, importing electronic devices from Korea results in an increase in the demand for the Korean won since the currency is needed to pay for the electronic devices.
- Inward or outward flow of foreign direct investment or portfolio investment and remittances—shares issued by a company in Norway can only be purchased with Norwegian krones. Foreigners will need to sell their currency to purchase the Norwegian krone to pay for the shares. The purchase of shares represents an inward flow of portfolio investment for Norway and hence an increase for the demand for Norwegian krones.

When Mexican workers in the USA send money back to their families (an inward flow of remittances for Mexico), they convert US dollars to Mexican pesos. In doing so, they sell US dollars (the supply of US dollars increases) to purchase pesos (the demand for Mexican pesos increases).

- **Speculation**—when a currency is expected to appreciate, foreigners may wish to purchase it ahead of the higher exchange rate. This would lead to an increase in the demand for the currency. If the Indonesian rupiah is expected to appreciate next year, speculators may decide to buy it now at the lower exchange rate to sell the currency at a higher price next year. This would lead to an increase in the demand for the Indonesian rupiah.
- **Changes in relative inflation rates**—if inflation in Canada exceeds the US inflation rate, US goods may become cheaper than Canadian goods over time. This would lead to greater imports of US goods in Canada, and reduced Canadian exports to the USA. Both the demand for, and supply of, the Canadian dollar would change as a result, leading to a depreciation of the Canadian dollar.
- **Changes in growth rates**—economic growth leads to increases in income. With higher income, residents of a country may buy more goods and services, some of which will be imported. Also, the higher economic growth may attract foreign investment. This would lead to increases in the supply of, and demand for, the currency. The overall impact on the currency would depend on the magnitude of the changes in demand and supply.
 - **Changes in interest rates**—a higher interest rate in Australia implies higher return on bank deposits at Australian banks. Foreigners may want to convert their savings to Australian dollars, and hence increase the demand for the Australian dollar, to transfer savings to an Australian bank account.
 - **Central bank intervention**—under fixed and managed exchange rate systems, central banks buy and sell currencies. To counter a downward pressure in the currency, the central bank of Vietnam may need to sell some of its foreign currency reserves to purchase the excess of Vietnamese dong on the foreign exchange market (this results in an increase in demand for the Vietnamese dong). When it needs to counter an increase in the value of the Vietnamese dong, the central bank may purchase foreign currencies using Vietnamese dong. This would increase the supply of the Vietnamese dong.

Revaluation (devaluation) refers to the increase (decrease) in the value of currency through intervention by the country's central bank. Thus, these two terms describe changes in exchange rates resulting from intervention in fixed exchange rate systems.

When the central bank tries to maintain the value of a currency lower (higher) than what it would be in a floating exchange rate system, the currency is said to be **undervalued (overvalued)**.

The central bank maintains the value of a currency mostly through the sale and/or purchase of its currency in the foreign exchange market, and/or changes in interest rates.

HL These are the advantages of a floating exchange rate.

- A balance of payment disequilibrium is automatically corrected.
- Monetary policy can be used to achieve domestic objectives (e.g. higher economic growth). Under a fixed or managed exchange rate, interest rates may need to be adjusted to maintain or influence the exchange rate.
- There is no necessity to hold foreign reserves.

These are the advantages of a fixed exchange rate.

- Uncertainty caused by fluctuation in exchange rates is reduced. Prices of imports, revenue from exports, foreign debts and return from foreign investment will not fluctuate.
- A fixed exchange rate encourages fiscal discipline. A fixed exchange rate regime may not be sustainable with relatively high inflation rates, which would lead to changes in demand for, and supply of, the currency. As such, governments are less likely to adopt expansionary fiscal policy.
- Firms will not benefit from a currency depreciation, which makes exports cheaper in foreign currency terms. It forces firms to remain efficient to keep the prices of their goods competitive.
- There is higher export revenue and economic growth if the exchange rate is fixed below the market value of the currency (it is an undervalued currency).

Changes in exchange rates will impact the economy through changes in the prices of export and imports.

- A change in the (X M) component of aggregate demand will affect demand-pull inflation, economic growth and unemployment.
- There will be changes in the price of imported resources, which will affect cost-push inflation.
- More (less) affordable imported goods and services would lower (increase) the cost of living and improve (worsen) residents' **standard of living**.

>> Assessment tip

This could also apply to a

devaluation. If a definition can apply to two different economic terms then it is vague. The

candidate should have specified

that this fall in the currency's value is the result of a change in market forces (or that it takes place in a floating exchange rate system).

One descriptor of the highest mark band for questions carrying at least 10 marks is the *appropriate use of economic terms*. A lot of terms are introduced in this sub-unit, and some may seem to describe a similar phenomenon. For example, devaluation and depreciation both refer to a fall in the value of a currency. However, a devaluation is the result of the central bank's intervention, while a depreciation is the result of changes in market forces.

QUESTION PRACTICE

This question is adapted from the May 2021 examination paper. Define the term depreciation.

[2]

SAMPLE STUDENT ANSWER

A depreciation is the fall in the value of a currency expressed in terms of another currency.

This response could have achieved 1/2 marks.

Assessment tip

An exchange rate diagram may look like a demand and supply diagram, but the vertical axis should not be labelled as just "price". An exchange rate is the price of a currency in terms of another currency. Therefore, the label for the exchange rate for the euro in terms of the US\$ may be "price of euro in US\$" or "exchange rate $\frac{\text{US}\$}{\text{US}}$ ".

Note that if you use a currency pair (such as $\frac{US\$}{euro}$) for your vertical axis label, the currency on the denominator is the currency listed on the horizontal axis (it is the currency that is bought and sold).



This question is adapted from the November 2021 examination paper.

Using an exchange rate diagram, explain the effect on the South Korean won's exchange rate of South Korea's central bank selling US dollars.

[4]

SAMPLE STUDENT ANSWER

Response 1

By selling US dollars, the demand for won increases, since the South Korean central bank is demanding won in exchange for U.S dollars. This shifts demand for won from D to D1,

lantíty

[:] money

increasing the exchange rate of won from ERe to ER1.



D1

The explanation establishes a link between the sale of US\$ and the demand for Korean won.

▲ The candidate clearly indicates the rightward shift of the demand curve and the increase in the exchange rate with arrows.

However, the vertical axis is not labelled correctly-it should be "price of Korean won in US\$" and not "value of Korean won in US\$". It is likely that this diagram would only be given 1 mark.

This response could have achieved 3/4 marks.

ER1

ERE



QUESTION PRACTICE

This question is adapted from the November 2020 examination paper.

Read the following passage and answer the question that follows.

The depreciation of the Argentinian peso causes imported oil prices to go up, further raising inflation. The falling real incomes of households combined with higher interest rates will affect the economy negatively, possibly leading to a recession. Interest rates will remain high for some time, discouraging investment. Economists expect Argentina to fall into recession, for the fifth time in a decade.

Using an AD/AS diagram, explain how the peso's weakness is "raising inflation".

[4]

SAMPLE STUDENT ANSWER



- A weaker peso will make imports more expensive and exports cheaper. This can increase the exports from Argentina with an
- increase in export quantity and export revenue. At the same time,
- professe proceptic operators of a set of the set of the
- as imports become more expensive, domestic consumers will turn
- to cheaper alternative domestic products, decreasing consumption
- of imports. Together, the weaker peso can increase net export (X-
- M) in the country by raising export (X) and reducing imports
- (M), shifting aggregate demand from AD1 to AD2. As such, the
- general price level increases from PLI to PL2. Hence, the peso's

weakness raises inflation.

It is likely that this response would not be awarded a mark.

Response 2

A deprecation of the peso means that imports become more expensive, leading to cost-push inflation. This is shown in the diagram below. ▼ While a depreciation could lead to an increase in aggregate demand if export revenue increase due to the lower prices of exports in foreign currency terms and/ or lower import spending due to more expensive imports, that is not what the passage describes. On the contrary, the mention of a recession in the passage points to a decrease in aggregate demand so this response is incorrect. Paper 2 questions always refer to text and/or data provided and must be answered in context.

▲ In contrast to response 1, this response clearly points to the higher price of imported factors of production, which lead to costpush inflation as suggested by the text. The diagram is correctly and fully labelled with a leftward shift of the SRAS and the corresponding increase in the price level to reflect the higher inflation rate. Arrows clearly indicate the changes in SRAS and the price level.



Aggregate supply is the total amount of goods and services produced in an economy at a given price level over a period of time.

produced the new contenting he is greete prior deter over a perior of crite.

- increased import prices causes costs of production to increase,
- shifting the SRAS curve left to a new equilibrium at PI. The
- average price level of the economy has increased, therefore,
 - imported inflation has occurred due to the weakness of the peso.

This response could have achieved 3/4 marks.

Content link

There is no reference to the specific imported factor of

production that leads to higher

production costs (oil).

News articles on the impact of a change in exchange rate on economic indicators are a good choice for a commentary—in particular, if the article provides the reason for the change in the currency (e.g. fall in demand due to lower export revenue). This allows you to apply economic theory to explain both the change in the price of the currency and the impact on the economic indicator (on inflation, for example).

However, be mindful that there are a few ways a change in currency may affect the rate of inflation—as we saw in the previous practice question. The article may establish that the higher inflation rate is due to a significant increase in export revenue, which would point to demand-pull inflation. It could also be that the higher price of imports following a depreciation has led to cost-push inflation. Make sure you explain the correct impact to achieve the highest mark on criterion C: Application and analysis.

Concept link

Change—a change in an economic variable can have very different impact on different stakeholders. For example, the price of the traditional Peruvian staple food, quinoa, increased significantly when it became popular as a superfood in overseas markets. The resulting increase in the value of Peruvian exports led to the appreciation of Peru's currency, the sol. This was good news for quinoa producers who enjoyed higher income cheaper imports in domestic currency terms. Firms who had taken foreign loans benefited from smaller repayments in domestic currency after the appreciation of the sol. In contrast, it was not good news for the residents of Peru who were not quinoa producers and had to spend so much more on food that they had little income left to enjoy cheaper imports. This impact of the change in trend for superfood on the exchange rate of the sol and the differing impact of that exchange rate appreciation on the welfare of the people of Peru is an apt illustration of the concept of change.

4.6 BALANCE OF PAYMENTS

This sub-unit examines the different accounts (and their components) of the balance of payments and the interdependence between those accounts. The relationship between the current account and the exchange rate is another important feature of this sub-unit.

You should be able to:

- ✔ define the terms
 - ✓ balance of payments
 - ✓ current, capital and financial accounts
- list and explain the components of each of the accounts in the balance of payments
- calculate the deficit/surplus in any one of the accounts of the balance of payments
- explain that the sum of the current, capital and financial accounts equals zero.

HL In addition to the points above, for HL you should be able to:

- explain why a deficit (surplus) in the current or financial account of the balance of payments may result in downward (upward) pressure on the exchange rate of the currency
- discuss, with the aid of real-world examples, the implications of a persistent current account deficit
- explain the methods a government can use to correct a persistent current account deficit
- evaluate the effectiveness of expenditure switching policies, expenditure reducing policies and supply-side policies as measures to correct a persistent current account deficit with the aid of real-world examples
- apply the Marshall-Lerner condition to the effect of a currency devaluation or depreciation on the current account
- explain the J-curve effect, with reference to the Marshall-Lerner condition
- discuss, with the aid of real-world examples, the possible consequences of a persistent current account surplus.

Summary

The balance of payments is a record of all the transactions between the residents of a country and the residents of all other countries over a year.

The transactions in the balance of payments are categorized into three accounts.

- The **current account** includes the funds related to the trade in goods and services (export revenue minus import expenditure), net investment income flows (profit, interest and dividends) and net current transfers (foreign aid, grants and remittances).
- The **capital account** includes all capital transfers (e.g. debt forgiveness, payment for inheritance taxes), and transactions in non-produced assets (e.g. land rights such as land sold to embassies) and non-financial assets (e.g. patents and copyrights) between countries. The capital account is usually the smallest of the three accounts on the balance of payments.
- The **financial account** includes flows of funds related to foreign direct investment (FDI) and portfolio investment, the purchase and sale of a country's reserve assets (official assets) and funds related to official borrowing (by governments).

Credits (+) are inflows of funds and *debits* (–) are outflows of funds. There is a surplus (deficit) in an account of the balance of payment when the credits exceed (fall short of) the debits for that account.

Content link
Link to other sub-units

Refer to sub-unit 4.5 as a reminder of the reasons for changes in the demand for, and supply of, a currency. **HL** Credits (such as the export revenue) lead to an increase in the demand for the currency on the foreign exchange market. This puts an upward pressure on the exchange. Debits (e.g. FDI outflows) increase the supply for the currency. This leads to a downward pressure on the exchange rate.

More on the reserve assets (official assets)

A central bank keeps reserve assets to settle urgent international transactions, intervene in the foreign exchange market to influence the exchange rate or finance balance of payments deficits (see the next point on financial account surplus compensating for current account deficit). Reserve assets include foreign currency deposits and government bonds (e.g. US Treasury Bills). Note that the use (spending) of reserve assets will be recorded as a credit (+) on the balance of payments account whereas the accumulation (purchase) of official reserves is recorded as a debit (-). For example, if the People's Bank of China (the central bank of China) spends some of its US\$ reserves, the transaction will be recorded as an inflow or credit on China's balance of payments.

An account may be in deficit or surplus, but the balance of payments *should* always "balance"—the

HL A current account deficit may become a concern if it is persistent and represents a significant proportion of the country's GDP. A persistent deficit in the current account may lead to these situations.

- A **depreciation** of the currency may help decrease the current account but may lead to cost-push inflation and foreign investors losing confidence in the economy.
- **Higher interest rates** may be set, to attract financial investment to increase the financial account inflows. This may have a contractionary impact on the economy.
- There may be **sales of sale of domestic assets to foreigners** to increase inflows into the financial account.
- The country will experience **indebtedness** if the current account deficit forces the government to borrow from abroad to finance the deficit. The increase in foreign debts worsens the economic standing of the country and leads to **a poor credit rating by international agencies.**

sum of all the accounts in the balance of payment *should* always be zero:

current account + capital account + financial account = 0

The sum of credits should balance with the sum of debits across all accounts. As the capital account is usually small (almost insignificant), an imbalance in the current account is mostly compensated by the financial account. If portfolio investment and FDI inflows are insufficient to finance the current account deficit then, to ensure that the balance of payment balances:

- either the Central Bank uses its official reserves to finance the deficit (and we saw earlier that using reserve assets is recorded as a credit (+))
- or the country must resort to official borrowing, (which will also appear as a credit (+) on the balance of payments).
- **Contractionary demand-side policies** may be used to reduce lower import spending (see the next point on expenditure reducing policies). This may, however, lead to an economic slowdown.
- The combined effect of a lower (X M) component of the aggregate demand, lack of investment due to poor confidence and inability of the government to finance infrastructure due to high government debt will likely lead to lower economic growth prospects.

To reduce a persistent current account deficit, governments may consider these measures.

- Expenditure switching policies may be used, such as trade protection and/or a currency devaluation (or sharp depreciation if the currency operates in a managed exchange rate system). A devaluation (sharp depreciation) will only be effective in reducing a current account deficit if the Marshall-Lerner condition (explained below) is satisfied.
- Expenditure reducing policies may be used, such as contractionary fiscal policy and contractionary monetary policy, to reduce

consumers' willingness and ability to spend on all goods, inclusive of imports. Such policies may also help decrease inflationary pressures (which could be the root cause of the current account deficit) but could worsen an economic slowdown or recession.

• **Supply-side policies** may be used to promote efficiency and reduce firms' costs to raise export competitiveness, but these policies are often difficult to implement and only yield results in the long term.

A currency devaluation or depreciation implies that the foreign price of exports decreases and the domestic price of imports increases. The impact the changes on the prices of exports and imports have on the current account depend on the PED for exports and the PED for imports.

The **Marshall-Lerner condition** states that a currency devaluation (or a sharp depreciation) will improve the current account balance only if the sum of PED for exports and PED for imports is greater than 1. That is:

PEDx + PEDm > 1

Content link

Link to other sub-units

Consider the advantages and limitations of the policies learned in:

- sub-unit 4.3 for additional arguments in favour and against trade protection
- sub-units 3.5 and 3.6 for additional notes on the effectiveness of demand-side policies
- sub-unit 3.7 on supplyside policies and their effectiveness.

The Marshall-Lerner condition usually does not hold in the short run as price elasticities are low. Exporters and importers need time to adjust to price changes following the devaluation or depreciation. As a result, a current account will initially widen and only after a period of time will it narrow. This is known as the **J-curve effect**.



▲ Figure 4.6.1 The J-curve effect

A persistent surplus in the current account may lead to these situations.

- There may be an **appreciation** of the currency and hence **reduced export competitiveness**.
- There may be lower cost-push and demand-pull inflation due to lower prices of imports and lower
 (X M) component of aggregate demand.
- A higher rate of **employment** may result as jobs are created in export and import-competing industries.
- The current account surplus implies greater production (exports) than consumption (imports) and thus relatively **low levels of domestic consumption** (the residents of the country could enjoy a higher standard of living by consuming more imports).
- The current account surplus is likely to be compensated by a financial account deficit (since the capital account is usually a small part of the balance of payments). Portfolio and FDI outflows imply that domestic investors favour foreign markets over the domestic markers, leading to less **domestic investment**.

Test yourself

There are debits (outflow of funds) and credits (inflow of funds) associated with each component of the balance of payment. Can you provide a real-world example for each component—credit and debit—on your country's current and financial accounts? Can you explain each flow's impact on the exchange rate? (Remember that credits lead to an increase in the demand for the currency and debits lead to an increase in the supply of the currency.)

Table 4.6.1 Examples of credits and debits on specific countries' balance of payments

Account	Component	Country	Real-world examples	Impact on the exchange rate diagram
Current account	balance of trade in goods	India	<i>credit:</i> revenue from the exports of rice	demand for Indian rupees
			<i>debit:</i> expenditure on imports of petrol	supply of Indian rupees 1
Financial account	portfolio investment	USA	<i>credit:</i> payments for the purchase of Uber (a US company) shares by Canadian residents	demand for the US dollar T
			<i>debit:</i> payments for the purchase of Japanese government bonds by US residents	supply for the US dollar ↑

You may not find examples for all components but try to at least have examples for the balance of trade in goods, balance of trade in services, FDI and portfolio investment flows.

C	3	

QUESTION PRACTICE

This question is adapted from the May 2018 examination paper.

Table A provides information relating to the balance of payments for Urbania for 2017.

Table A: Urbania 2017 balance of payments

ltem	\$ million
Exports of goods	1527
Imports of goods	1393
Exports of services	V
Imports of services	954
Net income	-35
Net current transfers	-49
Net capital transfers	11
Net transactions in non-produced, non-financial assets	6
Net direct investment	-196
Net portfolio imvestment	285
Reserve assets	W

Urbania has a current account deficit of \$125 million in 2017.

(a) Using the information in Table A, calculate the value of V (exports of services) for Urbania in 2017.

[2]

_/

4.6 BALANCE OF PAYMENTS



▲ This is a good introduction of the first concept mentioned in the question, the current account. The candidate has also brought in one real-world example.

▲ The candidate demonstrates a good understanding of the main forms of expenditure methods trade protection and devaluation. The answer considers some of the factors that affect the effectiveness of such policies. There is a realworld example of trade protection and a diagram to illustrate the limitations of a devaluation.

There is no diagram to illustrate how tariffs work, although that is chosen as the real-world example. The J-curve is included but not used effectively. There is also no example of countries opting for a devaluation to reduce their current account deficit. Even the real-world example for trade protection is not precise—when did the US impose a higher tariff on steel?

SAMPLE STUDENT ANSWER

The current account is one of the three accounts of the balance of payments. The current account is in deficit when there are more debits than credits on all international transactions related to the trade in goods and services, income flows and current transfers. A current account deficit is often the result of expenditure on imports exceeding the revenue from exports. For example, the USA is a country which usually suffers from a current account deficit due to its trade deficit. Expenditure-switching methods include trade protection and currency devaluation. Trade protection methods such as tariffs and quotas help make imports more expensive and therefore lead to a reduction in the current account. For example, the USA increased its tariffs on imports of aluminum and steel. A tariff is a tax on imports which protects domestic producers from foreign competition. The higher price of aluminum and steel incentivized US producers of these goods to increase production. The amount of steel purchased by domestic consumers decreases due to the higher price but a higher share of the aluminum and steel purchased comes from local firms. Trade protection is especially appropriate for countries with the combined problems of a persistent current account deficit and low economic growth or high unemployment. As the import expenditure reduces but other components of aggregate demand are not affected, unlike for expenditure-reducing methods, the aggregate demand will increase, and this leads to higher economic growth and reduced unemployment.

If the country is on a fixed exchange rate system, the central bank may consider a devaluation to make exports cheaper in terms of foreign currency and imports more expensive in terms of domestic currency. This would also increase aggregate demand, but it would lead to other problems such as imported inflation and increase the value of foreign debts. A devaluation is also only effective in reducing a current account deficit when the Marshall-Lerner condition holds. That is when PEDx + PEDm > 1. The Marshall-Lerner condition usually does not hold in the short-term and hence a devaluation often worsens the current account deficit before it improves it. This can be seen in the following diagram.

Ģ	
\$ n	illion current account balance
	/
surplus	/
+	
0	6 12 18 24 months
	12 10 21
defícít	

The main reason countries may not want to use expenditure switching methods is that they often lead to retaliation by trade partners. This was especially the case in the USA which saw the EU and China impose tariffs on U.S goods. Alternatively, expenditure reducing policies such as contractionary monetary and fiscal polícies may be used to reduce a current account deficit. They are demand-side policies which are conducted by the central bank and the government respectively. The central bank may opt for contractionary monetary policy through an increase in interest rates in order to create incentives for consumers to save more and reduce their consumption on goods and services, and some of those would be imported goods. The higher interest rates may also attract foreign savings into local banks and so increase the financial account, which would help increase the value of the balance of payments. Contractionary fiscal policy, through increases in direct taxes, may also reduce consumers' disposable income. With a lower disposable income, consumers would be less able to afford goods and services and hence would buy less of imports.

A contractionary monetary policy may not be effective if consumers do not respond to the higher interest rate maybe due to high confidence in the economy. Contractionary fiscal policy may also not be effective if the majority of imports are necessities which consumers would still purchase when their disposable decrease. Furthermore, the main problem with using contractionary policies is that they lead to a fall in AD and this may not be advisable for countries which are facing an economic slowdown or a recession. Ideally, a country which faces high economic growth and high demand-pull inflation would use contractionary demand-side policies to reduce its current account deficit and at the same time reduce inflationary ▲ The candidate offers an alternative to expenditure switching methods and this helps establish the relative effectiveness of expenditure switching methods to reduce a current account deficit. A sufficient understanding of the policies and their workings is demonstrated.

▲ The candidate considers the effectiveness of the alternative policies and evaluates those policies.

▲ Supply-side policies are a valid alternative to expenditure switching policies. The argument helps establish the relative effectiveness of expenditure switching policies and so it answers the question. There is also a real-world alternative to illustrate the argument.

▼ The example and the workings of supply-side policies are underdeveloped. The candidate might have run out of time to explain this point. It would have been more strategic to elaborate on this method to reduce the current account deficit instead of expenditure reducing methods since an example could be provided for this argument. One alternative method would have been sufficient to answer the question.

▲ There is evidence of synthesis in this concluding paragraph.

pressures – especially since a high rate of inflation is often the root cause of a current account deficit and so targeting inflation may help maintain export competitiveness. Moreover, both expenditure-reducing and expenditure-switching methods are short-term measures in nature as they do not target the root of the problem, which is that domestic consumers prefer to buy imported goods. Supply-side policies may be a good alternative. They help improve export competitiveness and make local products more attractive than imports. Singapore is a country with a good record of use of supply-side policies to increase export revenue. The Singapore authorities have invested a lot in infrastructure to facilitate the growth of the bio-medical industries which now contribute significantly to the country's export revenue. Supply-side policies are more long-term in nature and have the great advantage of also leading to reduced cost-push inflation and higher long-term growth.

To conclude, expenditure switching methods may be more effective than expenditure reducing methods to help reduce a persistent account deficit but they lead to trade wars. Governments should also consider the impacts policies may have on other macroeconomic variables such as economic growth in deciding on which would be the most desirable and effective policy to reduce a current account deficit.

This response meets some but not all the descriptors of the second highest mark band (10–12). The candidate demonstrates a good understanding of the requirements of the question—all arguments are relevant and help to answer the question. The economic theory is explained, economic terms are used appropriately and there is evidence of evaluation and synthesis. However, although there are real-world examples, they are often underdeveloped and sometimes missing. A second diagram to illustrate the workings of a tariff should also be included.

This response could have achieved 10/15 marks.

4.7 SUSTAINABLE DEVELOPMENT

This sub-unit introduces the concepts of economic development and sustainable development.

You should be able to:

- ✓ define the terms
 - ✓ economic development
- ✓ sustainable development
- explain how a country's population would benefit from the pursuit of (any of) the Sustainable Development Goals (SDGs) and their contribution to sustainability.

HL In addition to the points above, for HL you should be able to:

explain that the existence of poverty in economically least developed countries (ELDCs) creates
negative externalities through over-exploitation of land for agriculture, and that this poses a
threat to sustainability.

Summary

Economic development is a process leading to improvements in standards of living, reduction in poverty, improved health and education along with increased freedom and economic choice.

Sustainable development is the economic development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

To achieve sustainable development, governments must strike a balance between three major goals.

- **Economic development**—the improvements in the standards of living, both material (more goods and services) and non-material (e.g. better healthcare and education)
- **Social progress**—the improvements in well-being must not be limited to economic gains but also include social improvements (e.g. empowerment of women, freedom of expression and the rule of law)
- **Environmental protection**—the use of resources must be sustainable to ensure that future generations continue to enjoy the same improvements in standards of living.

The United Nations introduced the 17 Sustainable Development Goals (SDGs) in 2015. The SDGs guide both developed and developing countries on their path to achieving sustainability by addressing economic development, social progress and environmental protection.

HL Low incomes in developing countries often do not permit farmers to adopt sustainable farming methods, forcing them instead to employ intensive methods. The use of **unsustainable farming methods** leads to pollution and the loss of land fertility, which will affect future generations.

Content link

Link to other sub-units

- Development is closely related to sub-unit 2.8 on market failure relating to externalities and common pool (common access) resources.
- Environmental degradation in less developed countries is often the result of the poor management of common pool (common access) resources such as forests.
- The threat to sustainability is a global problem, unsustainable activity in a (less developed or developed) country will affect citizens of all other countries and it calls for international cooperation.

Test yourself

Visit the United Nations' dedicated website to find out more about the 17 SDGs (https://sdgs.un.org/goals). In particular, find out how the World Bank and governments are working towards meeting the SDG(s) in specific countries. Paper 2 questions may cover sustainable development issues. You should be able to identify the SDG(s) that specific policies or programmes help to achieve.

Some of the SDGs may be very obvious (for example, a development programme providing women greater access to healthcare and family planning services will help achieve SGD 3–good health and well-being and SGD 5–gender equality); others may not come to mind immediately. For instance, world bank funds could be used to finance access to electricity in rural areas. Since poverty levels are often higher in rural areas in developing countries than in industrial areas, such a programme may help the transition from agricultural to manufacturing activities, reducing poverty and inequalities (SGDs 1 and 10).



clear link between poverty in less developed countries and external costs. The candidate also refers to the diagram. In less developed countries, farmers who do not have access to funds for modern tools may clear forests and land for farming using unsustainable methods such as slash and burn. Such methods lead to the emission of large amounts of carbon dioxide and affect the ozone layer. This induces climate change, destroys the natural habitat of many species and indigenous people. Using slash and burn methods will also remove nutrients that forests had, leading to infertility of the soil in the future. Hence, the use of these unsustainable methods which come about from poverty leads to external costs and the MSC is greater than the MPC on the diagram. There is thus market failure as seen by the overproduction (QS QE) and the resulting welfare loss, shaded on the diagram.

This response could have achieved 4/4 marks.

4.8 MEASURING DEVELOPMENT

You should be able to:

- ✔ explain the multidimensional nature of economic development
- explain how economic development may be measured using single and composite indicators
- discuss the strengths and limitations of using single and composite indicators to measure economic development
- ✔ distinguish between economic growth and economic development
- discuss the relationship between economic growth and economic development.

Summary

Economic growth can easily be measured by calculating the increase in real GDP, but economic development has multiple dimensions. It may come with changes in many variables such as higher income, reduced poverty and inequalities, better access to healthcare and education, and increased employment opportunities. As such, there are many possible ways to measure economic development.

A **composite indicator** is a summary measure of several indicators of development and so it aims to capture different aspects of economic development. The most famous is the Human Development Index (HDI), which looks at improvements made by a country in terms of healthcare, education and income. However, economists often use **single indicators** such as GDP/GNI per person (per capita) at PPP for ease of comparison since higher income implies greater access to goods and services, so it is often accompanied by greater well-being.

Other single indicators may focus on specific aspects of economic development (e.g. life expectancy at birth or access to healthcare and the Gini coefficient for determining the degree of income inequality in the country).

Economic growth often leads to economic development. Economic growth implies rising incomes and thus greater household spending on goods and services and greater tax revenues that a government may use to finance access to healthcare and education. However, economic growth may not lead to economic development if it is not inclusive and only a small proportion of households (such as business owners or government officials) see their incomes increase. It is also possible for a country to achieve economic development without growth in the short term if resources are diverted towards the production of merit goods.

Content link

Link to other sub-units

- Refer to sub-unit 3.1 on measuring economic activity where GDP/GNI per person (per capita) and the Happy Planet Index are covered.
- Many of the strengths and limitations of GDP/GNI statistics in measuring economic well-being also apply to the use of such indicators in comparing levels of development across nations.

This sub-unit looks at the various indicators of economic development.

. 7	Table 1 0 1 Cause sales	and limitations	of indicators		va aaamamaia da	
v.	lable 4.6.1 Strengths	and immations	or indicators	used to measu	re economic ae	veinnmeni
			01 11101001010			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

			Strengths		Limitations		
Sing	Single indicators:		Single indicators are easily		Single indicators cannot adequately reflect the		
•	GDP/GNI per person (per capita) at PPP			accessible as data such as GDP/GNI and population size are	accessible as data such as GDP/GNI and population size are	•	multidimensional aspects of development. Increases in GDP/GNI per capita may reflect
•	health and education indicators	•	 These indicators allow comparison on specific aspects of economic development. For example, primary school enrolment data provide a better indication of access to education than the HDI. 		economic growth but not development if the increase in income is not enjoyed by all households—GDP/ GNL per capita reflects "average income" but the		
•	economic or social inequality indicators	of economic development. For example, primary school			increase in the "average" may come with a greater variation in income). The higher GDP/GNI per capita		
•	energy indicators				may come from the production of goods that leads to		
•	environmental indicators				environmental degradation. Hence growth would not lead to sustainable development.		
Con	nposite indicators:	Composite indicators capture			Not all dimensions of development can be captured		
•	the Human Development Index (HDI)		multiple dimensions of economic development. Composite indicators are more reliable indicators than GDP/GNI statistics for countries that achieve growth without		by a single indicator. For example, the HDI does not provide insights on women's empowerment—		
•	the Inequality adjusted HDI (IHDI)	•			inequalities.		
•	the Gender Inequality Index (GII)			•	Data is not always available for many indicators in less developed nations, making comparisons		
•	the Happy Planet Index	C		dev	development.		between countries difficult.

📎 Assessment tip

The last question on paper 2 may ask candidates to look at the impact of economic policies on economic development. Here is an example.

Using information from the text or data and your knowledge of economics, evaluate the impact on economic development of the Tanzanian government's policy of spending on infrastructure projects.

Sometimes, because candidates cannot identify sufficient arguments to respond, they write about the impact of policies on economic *growth*—rather than *development* (which is the requirement of this question). Indeed, for this question some candidates wrote about the increase in aggregate demand and the resulting increase in real GDP, which come from increased government spending. Looking at the impact on economic growth would not be answering the question **unless** the link between growth and development is established in the response, for instance by using the example of greater tax revenue to finance infrastructure. Also keep in mind that growth may not always lead to development. For example, the construction of infrastructure may lead to environmental degradation, or the infrastructure may only benefit a small group of people.

QUESTION PRACTICE

This question is adapted from the November 2018 examination paper. List two components of the Human Development Index (HDI). [2]

SAMPLE STUDENT ANSWER

Education and healthcare.

This response would likely not be awarded a mark.

▼ Education and healthcare are some of the dimensions of economic development the HDI considers but they are not *components* or *indicators*. Any two of the following would have answered the question:

- life expectancy at birth
- mean years of schooling
- expected years of schooling
- GNI per person (per capita) at PPP.

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QUESTION PRACTICE

This question is adapted from the May 2016 examination paper.

Using data from Table 1 with reference to Rwanda and Nigeria, explain why higher gross national income (GNI) per capita may not lead to higher scores on the Human Development Index (HDI). [4]

Table 1 Selected economic data for Rwanda and Nigeria. (Source:
 adapted from www.hdr.undp.org accessed 29 September 2014.)

	Rwanda	Nigeria
Life expectancy at birth	64.1	52.5
Expected years of schooling	13.2	9.0
Gross national income (GNI) per capita (2011 purchasing power parity (PPP) US\$)	1403	5353
Human Development Index (HDI) value (2013)	0.506	0.504
HDI rank (2013)	151	152

SAMPLE STUDENT ANSWER

From the data, we can see that both countries have similar HD scores, but Nígería has a much hígher natíonal income per capita (U.S \$5353) than Rwanda (U.S \$1403). As GNI per capita is one of the components of the HDI, it must be that the other components of the HDI (life expectancy at birth, mean years of schooling and expected years of schooling) have pulled down Nigeria's score (life expectancy at birth and expected years of schooling are shown to be higher in Rwanda in table 1). While average income is higher in Nigeria, it does not mean that

- all residents of Nigeria have access to education and healthcare services. It highly likely that income inequality is much
- higher in Nigeria than Rwanda and that has prevented poorer
- households in Nigeria from having access to education and
- healthcare, which would add to economic development as
 - eflected by a higher score on the HDI.

the HDI is a composite indicator that includes more than just GNI per capita.

The candidate explains that

The candidate provides a possible reason to justify the two countries' similar scores for the HDI despite their significantly different GNI per capita scores.

This response could have achieved 4/4 marks.

4.9 BARRIERS TO ECONOMIC GROWTH AND/OR ECONOMIC DEVELOPMENT

This sub-unit looks at the factors that may lead to a low level of economic development and/or a low economic growth rate in less developed nations.

You should be able to:

define the terms

- ✓ poverty trap (poverty cycle)
- ✔ informal economy
- ✓ property rights
- explain how some individuals or communities may be caught in a poverty trap (poverty cycle)

capital flight

✓ infrastructure

- explain the economic, social and political barriers to economic growth and/or economic development
- discuss the significance of specific barriers to economic growth and/or economic development using real-world examples.



Summary

A poverty trap (poverty cycle) is a circular chain of events starting and ending in poverty. Poor communities are unable to invest in physical, human and natural capital due to low or no savings; poverty is therefore transmitted from generation to generation.

The **economic barriers** to economic growth and/or economic development include the following.

High levels of income and wealth inequalities —these result in a significant number of residents being unable to afford healthcare and education. This leads to low levels of human capital , which does not allow communities to break the poverty trap (poverty cycle), as they are unable to overcome the "low productivity" segment of the trap (cycle).

The **lack of access to infrastructure and appropriate technology** makes it difficult for structural change to take place, often keeping communities in low productivity agricultural activities. **Infrastructure** refers to the large-scale physical capital typically financed by governments that is essential for economic activity to take place (e.g. roads, utilities, telecommunications, sanitation).

- Another economic barrier is **dependence on the primary sector**, which is often characterized by low and fluctuating prices.
- The **lack of access to international markets** due to protectionist measures in developed countries makes diversification of economic activities difficult.
- The high share of workers employed in the informal economy, which refers to the part of an economy where activity is not officially recorded, regulated or taxed, forms an economic barrier. It makes it difficult for governments to raise funds to finance development.

- **Indebtedness** often leads to tax revenue being diverted from the provision of merit goods to service debts and this means that investment in human capital remains low.
- **Capital flight** occurs, which is when assets flow out of a country to seek a "safe haven" in another country. The financial capital that flows out of the country cannot be used to finance domestic investment, which could help break the poverty cycle.
- You will see in the sub-unit 4.10 that trade strategies may help to achieve economic growth and development. However, the **lack of sea access for landlocked countries** increases the shipping cost of exports and imports and makes such strategies difficult to implement.
- **Tropical climates** may result in low or fluctuating yields and **endemic diseases** affect labour productivity.

The **political and social** barriers to economic growth and/or economic development include the following.

- A country's institutional framework refers to the system of laws, regulations and procedures that govern socio-economic activities. Economic activity can be hindered by a **weak institutional framework**, which could be caused by:
 - an **inadequate legal system** where laws are not applied and enforced fairly
 - an **ineffective taxation structure**, which limits the ability of the government to raise funds to finance pro-development expenditures—for example, the prevalence of informal markets makes it difficult for the authorities to collect tax payments
 - an **underdeveloped banking system** that fails to provide poor and small-scale producers with the access to the funds needed to invest in physical, human and/or natural capital
 - **poorly established property rights** (the exclusive, legal, authority to own property and determine how that property is used, whether it is owned by the government or by private individuals)—well-defined and legally protected property rights permit the poor to use their land or property as collateral against a loan to start a business.
- **Gender inequality** is an economic barrier in a country where women have limited access to education and work opportunities. This leads to lower rates of economic growth as the country is deprived of the skills, talents and efforts of approximately half of the population.

Lack of good governance or corruption often lead to public funds being diverted away from economic development.

• Unequal political power and status permits certain groups to influence the government into adopting policies that advance their own narrow economic and political interests and not the interests of the economy.

Content link

Link to other sub-units

You learned about PED and YED in sub-unit 2.5.

- The PED for primary commodities is generally lower than the PED for manufactured products. As the production of agricultural commodities is subject to supply shocks (e.g. changes in weather), the changes in supply coupled with the low PED lead to wide price fluctuations.
- Agricultural products have a low YED so economic growth will not lead to significant increases in demand over time and thus prices of agricultural products do not increase as much as prices of manufactured goods.

3 Content link

Link to other sub-units

Refer to sub-unit 4.2.

- Trade protection leads to low export revenue as less developed nations are unable to export manufactured goods that offer a more stable source of income.
- Use tariff and quota diagrams to illustrate the reduction in export revenue when developed countries impose trade protection on goods from less developed countries.



▲ Figure 4.9.1a

▲ Figure 4.9.1b

Figure 4.9.1 shows two maps of the African continent. Figure 4.9.1a shows the regions where the temperature, precipitation and relative humidity drive the abundance of mosquitoes, which transmit the debilitating tropical disease of malaria. Figure 4.9.1b illustrates the railway network of African nations. Try to identify countries where economic growth and development might be limited by the lack of infrastructure, lack of sea access and easy spread of tropical diseases. You may also consider doing some research on the growth rates and development indicators of those countries. Those would be good real-world examples to illustrate your essays.

QUESTION PRACTICE

This question is adapted from the May 2017 examination paper.

[2]

Define the term poverty trap (poverty cycle).

SAMPLE STUDENT ANSWER

Response 1

The poverty cycle takes place when low incomes lead to low savings, resulting in low investment which keeps productivity low.

This response could have achieved 1/2 marks. Response 2

The poverty cycle is a self-perpetuating circular chain of events starting and ending in poverty. A low income would imply difficulties in saving and this would likely lead to low capital accumulation or investment in human capital (e.g. education), which are necessary to increase productivity. Without an increase in productivity, income will not increase and thus individuals remain trapped in poverty.

This response could have achieved 2/2 marks.

▲ This response explains why low incomes make it difficult to increase productivity.

However, the candidate does not establish that the low income will self-perpetuate (there is no notion of a cycle or trap).

▲ This candidate clearly explains why low income would make it difficult to escape poverty.

4.9 BARRIERS TO ECONOMIC GROWTH AND/OR ECONOMIC DEVELOPMENT

QUESTION PRACTICE

This question is adapted from the May 2017 examination paper. Explain **two** reasons for which a highly unequal income distribution may prove a barrier to economic development.



[4]

SAMPLE STUDENT ANSWER

A highly unequal distribution of income implies that the

- poorest might not be able to afford education. This would
- make it difficult for them to gain skills for increased labour
- productivity. As low productivity leads to low income, they are unable to break the poverty cycle.

A highly unequal distribution of income may lead to lower consumption and thus lower AD (because the rich have a lower propensity to consume) leading to slower growth.

The first reason given by the candidate could be awarded 2 marks; the second reason is only a partial answer and as such would only be rewarded with 1 mark.

This response could have achieved 3/4 marks.

QUESTION PRACTICE

This question is adapted from the November 2009 examination paper. Using real-world examples, evaluate the view that, to achieve greater economic growth and development, countries must lessen their dependence on the production of primary commodities. [1

[15]

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SAMPLE STUDENT ANSWER

Firstly, it is important to distinguish economic growth from economic development. While economic growth is a more quantitative concept (increase in income/production), economic development is a more qualitative concept which comes with multiple dimensions. One of the barriers to economic growth and development in less developed countries (LDCs) is the overreliance on primary commodities, which refer to the resources of natural origin. Commodities include minerals such as coal, copper, iron ore, rough diamonds and crude oil, and agricultural products such as wheat, coffee beans or cotton.

Economic growth is the sustained increase in economic activity, often measured by the increase in real GDP over time. It usually comes from increases in aggregate demand (AD). As expenditure on domestically produced goods increases, ▲ The lack of access to education is indeed a barrier to economic development. The candidate establishes a clear link between the low levels of education and low levels of economic development through the poverty trap.

Economic growth is indeed needed for economic development but the candidate does not establish a link to economic development. That link could have been established by mentioning the difficulties in funding education and healthcare due to lower tax revenue, or by pointing out that income would remain low and keep people trapped in poverty.

▲ The main concepts that appear in the question are clearly introduced and the candidate establishes the idea of overreliance on the primary sector as a barrier to economic growth and development.

▲ Relevant economic theory (economic growth) is explained. A diagram is also included.



Real GDP

▲ The candidate explains why the over-reliance on agricultural products is a barrier to economic growth. The argument is illustrated by a real-world example. There are also adequate references to the diagram to illustrate the argument.

In many LDCs, the majority of workers are employed in agriculture and the production of other commodities depending on the resource endowment of the country. The sale of commodities also makes up a large proportion of export revenue - for example, Bolívia's main exports are natural gas, zinc ore, gold and soybeans. As such, changes in AD are largely correlated to changes on expenditure on commodities. Unfortunately, many commodities, especially agricultural products, are subject to wide price fluctuations. Agricultural products are subject to weather conditions. When good weather allows for a bountiful harvest, the supply for agricultural products will increase. Similarly, the supply will decrease with floods or drought. For example, the world price of soybeans had increased a lot in 2012 and 2013 due to dry soil conditions and hot temperatures – this is shown by the shift from S1 to S2 on the next diagram which illustrates the market for soybean. Bad weather conditions and increased production in South America, motivated by the previous increase in price, led to an increase in supply of soybean (from S1 to S2 on the diagram) from 2014 and the price of soybeans dropped by 50% (from P1 to P3) between 2014 and 2019. The wide fluctuation in prices (P2 to P3) which come from the changes in supply are



to invest into capital goods to raise productivity. Even when prices of agricultural products increase, the increase in income in the community may be offset by higher spending on food for residents who are not involved in the production of those crops. It would wrong to dismiss the contribution of commodity production to economic growth and economic development. Some countries have enjoyed considerable export revenue from the production of minerals which are less prone to supply shocks. A country like Australia enjoyed high economic growth rates thanks to high export revenue from iron ore. Bolivia also enjoyed

▲ The candidate builds on previous arguments to establish the need for diversification to lessen dependence on primary commodities. This paragraph addresses the specific demands of the question as it evaluates some of the arguments brought forward earlier, such as the lack of investment in the agricultural sector. More real-world examples are also used as illustrations.

some economic growth due to growth in the export revenue of petroleum, iron ore and gold. It would also be incorrect to state that no investment takes place in agriculture. The Bolivian government approved the use of some genetically engineered seeds for soybeans in 2019. It is also considering approving the use of biotechnology for corn and cotton. The new technology would increase production of those crops and hence supply, further depressing prices. However, the issue is not that the production of commodíties does not lead to economic growth and economic development but that the over-reliance on primary products does pose a barrier to economic growth and development. A country like Australia is highly diversified with a high share of its workforce employed in the secondary and tertiary sector. When the export revenue from commodities dropped due to lower demand from China, revenue from other sectors was able to help mitigate the drop in economic growth and continue to contribute to government tax revenue to finance infrastructure, merit and public goods.

To conclude, communities which are over-reliant on primary commodities are often trapped in poverty due to low fluctuating prices and a lack of scope for growth due to the income-inelastic demand, especially for agricultural crops. While there is evidence of some investment in agricultural production, it may be difficult for farmers with low income to afford improved capital. Governments should seek to diversify their economies. Diversification to reduce the reliance on one sector is one of the strategies available to governments to overcome the barrier to economic growth and development posed by the over-reliance of the economy on a narrow range of commodities.

This answer meets all of the descriptors for the highest mark band (13–15) and **could achieve 15/15 marks**.

and evaluation in the conclusion. The candidate has presented some judgments and summarized the main arguments given in the response.

▲ There is evidence of synthesis

Assessment tip

Paper 2 text materials may depict the problems faced by less developed countries. The specific barriers to economic growth and/or development may not be stated in the text but they are implied. For example, a table showing a high proportion of workers employed in the primary sector suggests that the country faces the economic barrier of dependence on primary sector production. A passage from the text might mention that women are less likely to attend primary school and that would point to the social barrier of gender inequality.

Identifying the barriers faced by a country in your response demonstrates greater use of economic terminology and understanding of economic concepts. It also helps you suggest appropriate policies and strategies to overcome those barriers to growth and/or development.

4.10 ECONOMIC GROWTH AND/OR ECONOMIC DEVELOPMENT STRATEGIES

You should be able to:

- define the terms
 - ✓ import substitution
 - ✓ export promotion
 - ✓ economic integration
 - ✔ foreign aid
 - ✔ development aid
 - ✔ humanitarian aid

- ✓ official development assistance (ODA)
- non-governmental organizations (NGOs)
- multilateral development assistance
- explain the strategies used by governments and/or multilateral institutions to promote economic growth and/or economic development
- evaluate the effectiveness of strategies and policies in promotingeconomic growth and/or economic development with the aid of real-world examples
- discuss the strengths and limitations of government intervention in contrast to market-oriented approaches to achieve economic growth and/or economic development with the aid of real-world examples
- evaluate the effectiveness of policies or strategies in meeting specific SDGs.

Summary

The governments of less developed countries (LDCs) may aim to promote economic growth and development using the following strategies.

Trade strategies

- **Import substitution**—this advocates replacing imports with domestically produced goods and services. This strategy requires the use of trade protection and is better suited to countries with large domestic markets allowing local firms to enjoy sufficient economies of scale to offer domestic consumers low prices.
 - **Export promotion**—this is a strategy targeting the expansion of export industries. In contrast to import substitution, export promotion focuses on the external rather than internal demand for goods and services. This policy is more suitable for countries with smaller markets that may not achieve sufficient economies of scale should firms focus on production for the domestic market. Note that countries with large markets may still prefer export promotion over income substitution for reasons such as avoiding tensions with trade partners resulting from trade protection.

This sub-unit introduces the policies and strategies available to governments to promote economic growth and/or economic development.

🕤 Content link

Link to other sub-units

Many of the strategies and policies aim to overcome the barriers to growth and development introduced in sub-unit 4.9.

- Trade strategies try to overcome the lack of access to international markets and diversify economic activities.
- Diversification of economic activities may reduce a dependence on the primary sector.
- Market-based policies require less government spending than interventionist policies and thus help overcome high indebtedness.
- Increased access to healthcare and education allows higher productivity, breaking the poverty cycle.
- Multinational corporations (MNCs) bring expertise and technology, and guarantee an export market.

Content link

Link to other sub-units

Refer to sub-units 4.1, 4.3 and 4.4 for the strengths and limitations of free trade, trade protection and economic integration.

Content link Link to other sub-units

Review sub-unit 3.7 for the strengths and limitations of supply-side policies.

• Economic integration—LDCs can form larger markets through regional free trade agreements. Protectionist measures from developed nations may also be reduced through free trade agreements.

Diversification

Diversification of economic activities can:

- reduce vulnerability to price fluctuations of commodities
- allow for structural change.

Market-based policies

- **Trade liberalization** can be used to encourage the growth of export industries, attract foreign firms and increase competition and efficiency in domestic markets.
- **Privatization** of public enterprises allows public funds to be redirected to merit goods. The profit-driven private firms will try to cut costs and decrease inefficiencies, leading to lower prices.
- Reducing red tape and unnecessary bureaucracy through **deregulation** of markets leads to higher efficiency and thus lower prices.

Interventionist policies

- **Redistribution policies** such as progressive tax structures, transfer payments and minimum wage regulations help to reduce inequalities, which tend to be high in LDCs.
- **Provision of merit goods** through education and health programmes may be used to increase labour productivity. Greater access to (improved) education and healthcare services also improves the living standards of the population and so it directly promotes economic development.
 - There may be **provision of infrastructure** including energy, transport, telecommunications, clean water and sanitation that decreases the overall cost of economic activity. This will attract foreign investment and promote local entrepreneurship.

Multinational corporations

Multinational corporations (MNCs) can be attracted by facilitating **foreign direct investment (FDI) inflows**. Refer to Table 4.10.1 for the strengths and limitations of FDI as a source of growth and, it is hoped, development.

Aid

Aid is an important policy tool that developed countries can use to promote economic development in poorer countries. **Foreign aid** refers to grants, concessional loans and/or technical assistance from developed to developing countries to promote economic development. Refer to Table 4.10.1 for the strengths and limitations of aid in promoting growth and/or development.

• Aid may come as **official development assistance (ODA)**—from governments and multilateral organizations such as the World

Bank. Aid may also come from **non-government organizations** (NGOs), which are private organizations that promote economic development and/or humanitarian ideals and/or sustainable development (Amnesty International is one example).

- There are different types of aid. **Humanitarian aid** is given to meet short-term needs (food aid, medical aid and emergency relief aid in the event of natural catastrophe or war). **Development aid** refers to the long-term assistance provided to developing countries in their development efforts (project aid, programme aid and debt relief).
- High indebtedness implies large debt repayments. The opportunity cost of debt servicing is the provision of infrastructure, education, healthcare and other public programmes. Debt relief refers to measures to reduce or refinance the high debt of LDCs to allow for the financing of growth and development strategies.
- **Multilateral development assistance** is the aid provided by international organizations such as the **World Bank** and the **International Monetary Fund (IMF)**. They help channel financial contributions from developed countries to LDCs.
 - The main aims of the World Bank are to provide aid and advice to LDCs, as well as reducing poverty levels and encouraging and safeguarding international investment.
 - The IMF is an organization working to foster global monetary cooperation, secure financial stability, facilitate international trade and reduce poverty.

Social enterprises

Governments may choose to facilitate the growth of **social enterprises**. These organizations are not profit-motivated and instead prioritize the welfare of local producers (e.g. farmers).

Institutional change

- **Improved access to banking**, including microfinance and mobile banking, allows farmers and small business owners to borrow funds to finance investment and break the poverty cycle.
- Women's empowerment is increased through increased access to education, job opportunities or funds to start small businesses. (Evidence suggests that the majority of microfinance scheme recipients are women. Some microfinance institutions issue loans exclusively to women.)
- In many counties an important aim is **reducing corruption** that often leads to higher transaction costs and deters FDI.
 - Establishing **property rights** and in particular **land rights** provides legal recognition and protection of assets (e.g. land for farmers). Assets may then be used as collateral to borrow funds for investment.

▼ **Table 4.10.1** Strengths and limitations of different strategies or policies to achieve economic growth and development

Policy/strategy	Strengths	Limitations
FDI	• This is direct spending by foreign firms (MNCs) on physical capital (the I component of AD increases).	• FDI may lead to the depletion of natural resources and threaten sustainability.
	FDI contributes to the host country's exports earnings and reduces balance of payments	• FDI may lead to future balance of payment deficits as profits are repatriated.
	deficits.	• MNCs may put political pressure on governments.
	• Technological transfer and training of workers lead to higher productivity.	• The tax contribution may not be significant because business tax rates are kept low to
	• A result of FDI is more jobs and higher income	attract MNCs.
	than in the agricultural sector, helping to break the poverty trap.	 Not all jobs created will be given to locals. Some MNCs may not train local workers and give higher
	• There is diversification of economic activities.	skill positions to foreign workers.
	• FDI is a source of foreign exchange.	
Foreign aid	• Project aid may lead to the building of infrastructure to attract investment and diversify economic activities away from agriculture.	 Aid may lead to indebtedness, with future public funds diverted away from development spending to service the debt.
	• Programme aid in the areas of education and	Receiving aid may lead to dependency.
	healthcare may help increase productivity and	Aid may be political.
	income and break the poverty cycle.	 Funds may not be channelled to development due to corruption.
		Aid may come with strict conditions, which the
		recipient country may not be able to meet.

QUESTION PRACTICE

This question is adapted from the November 2019 examination paper.

 Outline one possible disadvantage of foreign direct investment (FDI) for

 economically less developed countries.
 [2]

SAMPLE STUDENT ANSWER

Response 1

MNCs may repatriate profits.

This response could have achieved 1/2 marks.

Response 2

Domestic firms may not be able to compete with MNCs and this could lead to bankruptcies. This is especially the case for infant industries and small firms, which may not reap sufficient economies of scale to offer prices as low as MNCs.

This response could have achieved 2/2 marks.

The candidate has not explained why the repatriation of funds is a concern for economically less developed countries—for example, the repatriation of profits may lead to a deficit in the balance of payments. Attention must be given to the command term, "outline" (to give a brief account or summary).

▲ A clear cause for concern for economically less developed countries is established.

4.10 ECONOMIC GROWTH AND/OR ECONOMIC DEVELOPMENT STRATEGIES

QUESTION PRACTICE

Using real-world examples, evaluate the view that foreign aid is an effective means to achieve economic growth and development in less developed countries (LDCs). [15]

c1 .

SAMPLE STUDENT ANSWER

- Economic growth consists of short-term and long-term growth. Short-term growth refers to an increase in real GDP. Long-term growth refers to an increase in productive capacity. Economic development refers to a sustained improvement in living standards.
- Foreign aid refers to the assistance received by a country, typically a less-developed country (LDC), by a donor country or multilateral organisation.
- Foreign aid can promote economic growth and development in LDCs. Papua New Guinea (PNG) has received AU\$4777 million from Australia to promote economic development, specifically to help women and children. The money was spent on providing free education for women and children as well as the provision of vaccines to protect young children from diseases such as polio.



▼ Instead of listing all relevant terms at the beginning of the essay, the candidate should define them as they are used in the essay.

Explaining the relationship between economic growth and economic development (that economic growth is necessary for economic development, but that economic growth may not necessarily lead to economic development) might allow for a more effective introduction.

Aid is a broad concept. Assistance from donor countries and/or multilateral organizations may come in many forms—grants, concessional loans and/or technical assistance. A good essay on foreign aid needs to acknowledge that aid may come in various forms.

▲ A valid link is established between aid and economic development (that is, access to healthcare and education). A realworld example is also provided.

▼ The paragraph starts by stating that aid can promote both economic growth and economic development. However, no link to growth is established.

The candidate could have specified the type of aid received by Papua New Guinea (development aid). ▼ While this analysis and the accompanying diagram are theoretically correct, market failure is not directly relevant to this question. The focus should be on economic growth and development. It is important not to drift away from the focus of the essay question because it signals to the examiner that you do not understand the specific demands of the question.

▲ This is another valid argument to support the claim that foreign aid may lead to economic development. The poverty cycle diagram is relevant to the question. marginal social benefit (MSB) is greater than the marginal private benefit (MPB). Not only will individuals receive an education, these educated individuals tend to be more enterprising, which would lead to them bringing more efficiency to the economy when they enter the workforce. Hence, because benefits are enjoyed by third parties who are not involved in the consumption or production of education, the market equilibrium is found where MPB intersects with MPC, at Qe but the social optimum is found where MSB intersects MSC, at Qs. The foreign aid money spent by PNG on education will help reduce the underconsumption of education by increasing the supply of education in PNG.

Moreover, foreign aid could help communities break the poverty cycle, illustrated below. A higher level of education and healthcare in PNG would result in a higher level of human capital and thus productivity. This would increase the level of income. Stop the self-perpetuating poverty cycle allows for a sustained increase in living standards.

▲ The candidate considers some of the factors that could limit the effectiveness of aid. This reflects some understanding of the specific demands of the question.

▼ No real-world examples are provided to illustrate this argument. However, there are some factors that may affect the effectiveness of foreign aid as a tool to promote economic growth and development. The prevalence of corruption may lead to parts of financial aid being diverted to the pockets of government officials. Foreign aid may also lead to dependency and the over-reliance on aid may make it difficult for governments to continue to finance economic growth and development if aid is discontinued.

Low ínvestment

Low savings

This response meets most of the descriptors of the (7–9) mark band. Here are some pointers to push this response to a higher mark band.

• The response does not address all the demands of the question no link is established between foreign aid and economic growth. This could have been done by considering the contribution of aid in the form of debt relief to greater government spending on domestically produced goods and services (higher aggregate demand), leading to short-term growth. The contribution of project aid to finance infrastructure would also lead to long-term growth.

- Economic theory is not fully explained. The candidate should have explained that aid may come in various forms (e.g. debt relief, project aid, concessional loans, technical assistance) and that economic growth is needed for economic development to take place but that economic growth may not necessarily lead to economic development.
- The diagrams are not all relevant to the question. The poverty cycle is an adequate diagram, but the market failure diagram is not necessary to answer the question. An AD/AS diagram to illustrate the contribution of foreign aid to economic growth would have been more appropriate.
- One real-world example is provided but more variety is needed. Examples could have illustrated different types of aid (one example of a debt relief programme could have been given) or the limitations of foreign aid (e.g. countries with high level of corruption).

This response could have achieved 7/15 marks.

Concept link

- Economic well-being—economic development and sustainable development come with improvements in the economic well-being of the residents of a country. Using the different aspects of economic well-being could also help you establish whether a policy or project promotes economic development or sustainable development.
- Interdependence—policies in developed countries (e.g. trade protection, provision of aid) affect LDCs. Some practices in LDCs pose a threat to sustainability, which affects all nations.
- Intervention—what type of policies are described in the article? Are they market-based or interventionist? Consider the strengths and limitations of government intervention in the context set in the article.
- Sustainability—poverty often leads to unsustainable practices and the over-exploitation of natural resources. Policies that help reduce economic well-being often help LDCs on their path to sustainability.

Content link

Few candidates opt for a commentary on economic development or sustainable development for Unit 4. After all, there are plenty of news articles on trade-related issues and currency fluctuations. However, many of the past topics (international trade, supply-side policies, for example) can be examined in the context of LDCs. Sub-units 4.7–4.10 also provide you with links to some of the key concepts (see "Concept link").

Assessment tip

Always draw your diagrams using a 2B pencil. This will mean that you draw dark lines or curves and make clearer diagrams. Using a ruler is always a good practice as it makes your diagrams more presentable. In this book, many diagrams in sample answers are given in colour, but bear in mind the following. Your exam scripts are scanned in black and white, so do not use coloured pencils to distinguish between lines or curves on a diagram—the examiner will not be able to distinguish between colours on the scanned script. You may continue to use colours for digitally assessed work submitted as PDF files.