

© International Baccalaureate Organization 2024

All rights reserved. No part of this product may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without the prior written permission from the IB. Additionally, the license tied with this product prohibits use of any selected files or extracts from this product. Use by third parties, including but not limited to publishers, private teachers, tutoring or study services, preparatory schools, vendors operating curriculum mapping services or teacher resource digital platforms and app developers, whether fee-covered or not, is prohibited and is a criminal offense.

More information on how to request written permission in the form of a license can be obtained from <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

© Organisation du Baccalauréat International 2024

Tous droits réservés. Aucune partie de ce produit ne peut être reproduite sous quelque forme ni par quelque moyen que ce soit, électronique ou mécanique, y compris des systèmes de stockage et de récupération d'informations, sans l'autorisation écrite préalable de l'IB. De plus, la licence associée à ce produit interdit toute utilisation de tout fichier ou extrait sélectionné dans ce produit. L'utilisation par des tiers, y compris, sans toutefois s'y limiter, des éditeurs, des professeurs particuliers, des services de tutorat ou d'aide aux études, des établissements de préparation à l'enseignement supérieur, des fournisseurs de services de planification des programmes d'études, des gestionnaires de plateformes pédagogiques en ligne, et des développeurs d'applications, moyennant paiement ou non, est interdite et constitue une infraction pénale.

Pour plus d'informations sur la procédure à suivre pour obtenir une autorisation écrite sous la forme d'une licence, rendez-vous à l'adresse <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

© Organización del Bachillerato Internacional, 2024

Todos los derechos reservados. No se podrá reproducir ninguna parte de este producto de ninguna forma ni por ningún medio electrónico o mecánico, incluidos los sistemas de almacenamiento y recuperación de información, sin la previa autorización por escrito del IB. Además, la licencia vinculada a este producto prohíbe el uso de todo archivo o fragmento seleccionado de este producto. El uso por parte de terceros —lo que incluye, a título enunciativo, editoriales, profesores particulares, servicios de apoyo académico o ayuda para el estudio, colegios preparatorios, desarrolladores de aplicaciones y entidades que presten servicios de planificación curricular u ofrezcan recursos para docentes mediante plataformas digitales—, ya sea incluido en tasas o no, está prohibido y constituye un delito.

En este enlace encontrará más información sobre cómo solicitar una autorización por escrito en forma de licencia: <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

# Economics

## Higher level and standard level

### Paper 2

15 May 2024

Zone A afternoon | Zone B afternoon | Zone C afternoon

1 hour 45 minutes

---

#### Instructions to candidates

- Do not open this paper until instructed to do so.
- You are permitted access to a calculator for this paper.
- Unless otherwise stated in the question, all numerical answers must be given exactly or correct to two decimal places.
- You must show all your working.
- Answer one question.
- Use fully labelled diagrams and references to the text/data where appropriate.
- The maximum mark for this examination paper is **[40 marks]**.

Answer **one** question.

1. Read the extracts and answer the questions that follow.

### Text A — Overview of the United Kingdom (UK)

- 1 The United Kingdom (UK) is a country in Europe. By early 2022, its economy had recovered from a deep **recession**. However, there were significant risks ahead. Inflation was rising and, as demand management policies to reduce inflation took effect, the growth rate of gross domestic product (GDP) began to slow again.
- 2 Inflationary pressures were due to rising energy prices, shortages of labour and high government spending. The central bank raised interest rates several times during 2021 and 2022 because inflation rose above the target rate of 2%. At the same time, the International Monetary Fund (IMF) recommended that government spending on infrastructure, skills and innovation should be increased.
- 3 Since 2020, the deficit on the current account of the balance of payments has increased. Higher expenditure on imports of manufactured goods, oils and other fuels added to the deficit on the balance of trade in goods.
- 4 Fluctuations in the exchange rate for the pound (UK£, the UK's currency) are considerable (**Figure 1**). The overall trend since 2014 has been for export prices (measured in foreign currencies) to decrease. However, the UK export market share in world trade has been gradually declining.
- 5 Currency depreciation is expected to increase inflows of foreign direct investment (FDI) and **portfolio investment**. However, the effect on the trade balance is less predictable, partly because imported raw materials and components are a large proportion of the cost of exported goods. The demand for UK exports of services, including banking, insurance, and business services, is price inelastic. Other factors such as quality and reputation are usually more important than price in determining demand.
- 6 In addition, UK manufacturing exports are mainly high technology goods, which are less sensitive to price changes than to other demand factors. For example, the long-run price elasticity of demand (PED) for pharmaceuticals exported from the UK has been estimated to be  $-0.6$ , whereas for machinery it is  $-1.1$ . In the short run, the PED is lower for all exported goods, averaging  $-0.15$ .
- 7 Changes in the incomes of people overseas are usually more significant in determining export demand than changes in prices. The income elasticity of demand (YED) for most UK exports is positive and can be quite high. For example, the YED is 2.6 for exports of pharmaceuticals. However, the YED is only  $-0.07$  for exports of shoes.

### Text B — Free trade agreements with Australia and New Zealand

- 1 The UK exited the European Union (EU) in 2020. Since then, free trade agreements (FTAs) have been negotiated with Australia and New Zealand. These FTAs will result in the gradual elimination of almost all tariffs. Therefore, some export sectors in the UK economy are predicted to grow, particularly in the areas of “green” technologies and digital services.

(This question continues on the following page)

**(Question 1 continued)**

- 2** However, it is estimated that the effect of these agreements will increase UK GDP by only 0.11 % per year. While the overall benefit will be small, the negative effect on some industries will be significant. UK farmers are concerned that these FTAs could damage their competitiveness and cause UK agricultural output to fall.

**Text C — The net zero strategy in the UK**

The UK plans to achieve carbon neutrality by 2050. By 2035, emissions of carbon should be reduced to 22 % of the 1990 levels. The net zero strategy includes measures to encourage firms to invest in the development, production and use of low-carbon goods. For example, subsidies are provided for the production of solar panels because when they are used to generate electricity, there is less need for fossil fuels. Consequently, the output of fossil fuels moves closer to the social optimum. Innovative “green” goods that benefit the environment can also be exported.

**Table 1: Economic data for the UK**

	<b>2011</b>	<b>2021</b>
Real GDP per capita (UK£)	27 996	30 246
Unemployment (% of labour force)	8.0	4.5
Inflation (annual % change in consumer price index)	3.9	2.5
Exchange rate (US\$ per UK£)	1.61	1.37

**Table 2: Selected balance of payments data for the UK (UK£ billion)**

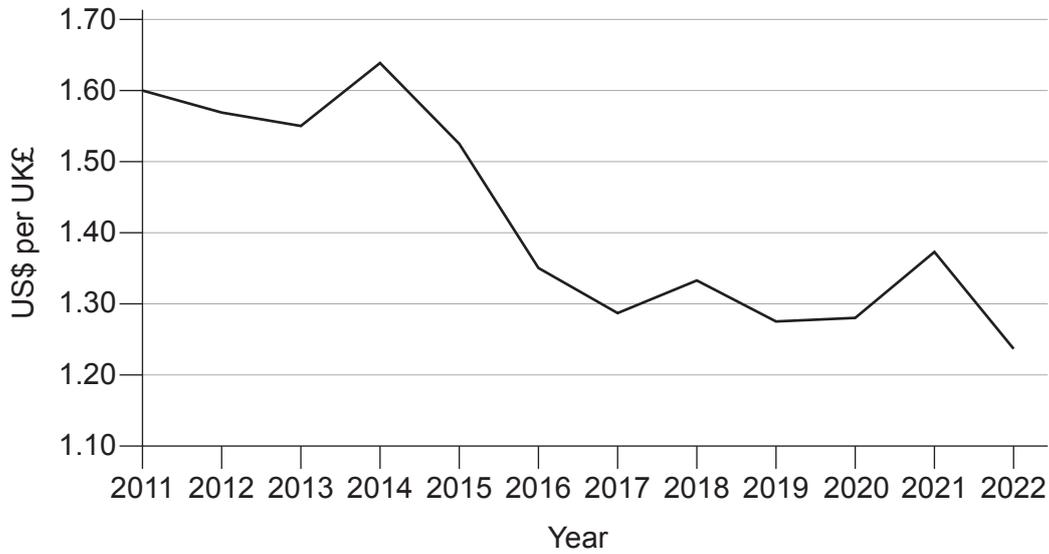
	<b>2011</b>	<b>2021</b>
Balance of trade in goods	–103	
Balance of trade in services	86	127
Income	6	–12
Current transfers	–21	–19
Current account balance	–32	–60
FDI	34	58
Portfolio investment	–10	–25
Reserve assets	–5	18

**(This question continues on page 5)**

Blank page

(Question 1 continued)

Figure 1: Exchange rate from 2011 to 2022 (US\$ per UK£)



- (a) (i) Define the term *recession* indicated in bold in the text (**Text A**, paragraph **1**). [2]
- (ii) Define the term *portfolio investment* indicated in bold in the text (**Text A**, paragraph **5**). [2]
- (b) A pharmaceutical good is priced at UK£5 per unit and the exported quantity is 1000 units. The price decreases to UK£4.
  - (i) Using the price elasticity of demand figure for pharmaceuticals exported from the UK (**Text A**, paragraph **6**), calculate the revenue earned in UK£ after the price change. [3]
  - (ii) Using information from **Table 2**, calculate the balance of trade in goods (UK£ billion) for the UK in 2021. [2]
- (c) Using an AD/AS diagram, explain the likely effect on the UK’s real GDP of higher interest rates (**Text A**, paragraph **2**). [4]
- (d) Using an exchange rate diagram, explain the likely effect on the exchange rate for the pound (UK£) of increased international demand for “green” goods produced in the UK (**Text C**). [4]
- (e) Using an international trade diagram, explain how imports of agricultural goods to the UK are likely to change as a result of the free trade agreements with Australia and New Zealand (**Text B**, paragraph **2**). [4]
- (f) Using an externalities diagram, explain why the output of fossil fuels moves closer to the social optimum when subsidies are provided for the production of solar panels (**Text C**). [4]
- (g) Using information from the text/data and your knowledge of economics, discuss the likely effects of the exchange rate trend from 2011 to 2022 (shown in **Figure 1**) on the UK balance of payments and the UK economy. [15]

2. Read the extracts and answer the questions that follow.

### Text D — Overview of the Philippines

- 1 The Philippines is a country in the Asia–Pacific region. Growth rates of gross domestic product (GDP) in the 2020s are expected to average 5 % per year. With increasing urbanization, a growing middle class and a large, young population, the Philippines’ economic growth is based on strong consumer demand.
- 2 Although the primary sector is still important, there is stronger growth in the services sector, including tourism and insurance. **Remittances** from overseas workers also contribute a lot to national income.
- 3 The government has made progress in reducing poverty, partly due to policies that encourage workers to leave agriculture for higher wage jobs in other sectors. However, poverty reduction is proceeding slowly, with more than 70 % of the labour force still working in low-wage jobs in the informal economy. The Philippines is vulnerable to natural disasters, such as earthquakes and droughts, which damage the economy and most severely affect the poor who work in farming and fishing. Fish stocks are falling due to illegal fishing and climate change. Agricultural productivity is low and unsustainable practices have caused deforestation.
- 4 Infrastructure and public services, including health care and education, are inadequate in many rural areas and there is poor nutrition in low-income households. Rising food and fuel prices will further reduce real incomes. For the lowest income earners, food amounts to 60 % of total expenditure, while the highest income earners spend only 28 % on food. This can be explained by the low-income elasticity of demand (YED) for food.
- 5 An **expansionary fiscal policy** has caused a persistent budget deficit. Higher global energy prices and the depreciation of the peso (₱PHP, the Philippine currency) have added to inflationary pressures. In response, the central bank raised its interest rate several times, from 2 % in 2021 to 5.5 % in 2022.
- 6 The Philippines has experienced more free trade in agricultural goods following its membership of the ASEAN economic community (a free trade area). For example, a quota on pork imports into the Philippines has been removed.
- 7 However, to help local farmers, a 35 % tariff has been placed on rice imported into the Philippines, even though rice and other cereals account for a large proportion of imports. Tariff revenues are used to provide subsidies for modern farm equipment, seeds and training for rice farmers. The aim is to create a more efficient and competitive agricultural sector.

### Text E — Reduction of poverty rates in the Philippines

- 1 In order to achieve the first Sustainable Development Goal (SDG), the government of the Philippines aims to eliminate extreme poverty by 2040. In 2019, taxes were increased on tobacco, alcohol and e-cigarettes, partly to fund an expansion of the public health care system.

(This question continues on the following page)

**(Question 2 continued)**

- 2** Another programme provides regular cash payments to mothers, conditional on their children regularly attending school and receiving preventive health check-ups. Therefore, it is reducing poverty, improving human capital and increasing gender equality. According to a World Bank study, the Philippines’ programme is one of the most efficient social support systems in the world: it costs only 0.4 % of GDP, yet covers nearly 20 million people.
- 3** The government gives fuel subsidies to private bus drivers who provide transport in rural areas. In addition, the bus drivers are asking for an increase in the legal minimum price that they charge passengers, although the minimum (floor) price is already above the equilibrium price.

**Text F — Infrastructure and job creation in the Philippines**

Infrastructure in the Philippines, including infrastructure related to information technology, is being improved, in order to create jobs and connect the poor to more opportunities and basic services. Many projects are financed by Official Development Assistance (ODA), which includes loans and grants. The ODA funding also supports programmes for youth employment and for improving skills. Training is provided for priority areas: agricultural businesses, construction, information technology, management, tourism, and firms run by women entrepreneurs.

**Table 3: Economic data for the Philippines**

	<b>2012</b>	<b>2021</b>
Real GDP per capita (₱PHP)	127 000	163 000
Real gross national income (GNI) per capita (₱PHP)	141 000	168 000
Inflation (annual % change in consumer price index)	3.0	3.9
Unemployment (% of labour force)	3.5	2.4
Exchange rate (₱PHP per US\$)	42.23	49.25

**Table 4: Development data for the Philippines**

	<b>2012</b>	<b>2021</b>
Population (million)	97	111
Absolute poverty (% of population)	10.9	3.0*
Gini coefficient	0.465	0.441
Human Development Index (HDI)	0.644	0.699
HDI ranking out of 191 countries	111	116

\* estimate

**(This question continues on the following page)**

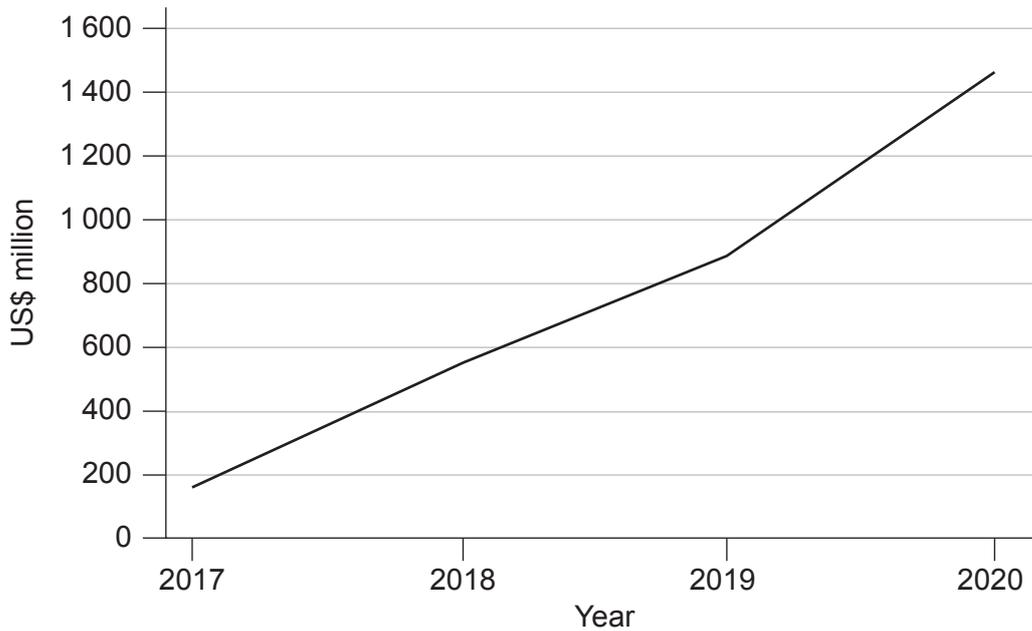
(Question 2 continued)

**Table 5: Selected national income items for the Philippines in 2022\***

	<b>PHP billion</b>
Consumption	14 600
Investment	3 780
Government spending	3 700
Exports of goods and services	5 400
Imports of goods and services	
GDP	19 700
Net income from abroad	
GNI	20 500

\* estimate

**Figure 2: Net official development assistance (ODA) received by the Philippines from 2017 to 2020 (current US\$ million)**



(This question continues on the following page)

**(Question 2 continued)**

- (a) (i) Define the term *remittances* indicated in bold in the text (**Text D**, paragraph **2**). [2]
- (ii) Define the term *expansionary fiscal policy* indicated in bold in the text (**Text D**, paragraph **5**). [2]
- (b) (i) Using information from **Table 5**, calculate the value of imports of goods and services (₱HP billion) into the Philippines in 2022. [2]
- (ii) Using information from **Table 5**, calculate the value of net income from abroad (₱HP billion) in the Philippines in 2022. [1]

A middle-income household in the Philippines earned ₱HP 4000 weekly in 2021. Its weekly income increased to ₱HP 4200 in 2022. Its weekly demand for rice decreased from 4 kilograms (kg) to 3.9kg between 2021 and 2022.

- (iii) Calculate the income elasticity of demand for rice for this household. [2]
  - (c) Using an AD/AS diagram, explain the likely effect on the Philippines' real GDP as a result of higher global energy prices (**Text D**, paragraph **5**). [4]
  - (d) Using an international trade diagram, explain how the government of the Philippines gains revenue by imposing a tariff on rice imports (**Text D**, paragraph **7**). [4]
  - (e) Using a demand and supply diagram, explain what is likely to happen to the consumer surplus if the minimum (floor) price charged by private bus drivers is raised further above the equilibrium price (**Text E**, paragraph **3**). [4]
  - (f) Using a poverty cycle diagram, explain the likely effect of official development assistance (ODA) on incomes in the Philippines (**Figure 2** and **Text F**). [4]
  - (g) Using information from the text/data and your knowledge of economics, evaluate the policies used in the Philippines to reduce poverty and income inequality. [15]
-

**Disclaimer:**

Content used in IB assessments is taken from authentic, third-party sources. The views expressed within them belong to their individual authors and/or publishers and do not necessarily reflect the views of the IB.

**References:**

- Text A** International Monetary Fund, 2022. *IMF Country Report No.22/56*. [pdf online] Washington: International Monetary Fund. Available at: <https://www.imf.org/en/Publications/CR/Issues/2022/02/22/United-Kingdom-2021-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-513439> [Accessed July 2022]. Source adapted.
- Office for National Statistics, 2022. *Balance of Payments, UK: January to March 2022*. [online] 30 June. Available at: <https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/bulletins/balanceofpayments/januarytomarch2022> [Accessed July 2022]. Source adapted. Contains public sector information licensed under the Open Government Licence v3.0.
- Office for National Statistics, 2017. *Economic Review*. [online] 13 July. Available at: <https://www.ons.gov.uk/releases/ukeconomicreviewjuly2017> [Accessed July 2022]. Source adapted. Contains public sector information licensed under the Open Government Licence v3.0.
- Delis, A., Ioannidis, C. and Stamatogiannis, M., 2020. *Determinants and Trade Elasticities for UK Exports across Different Sectors and Destinations*. [pdf online] Birmingham: Aston Business School. Available at: <https://www.lbpresearch.ac.uk/wp-content/uploads/2021/01/Determinants-and-Trade-Elasticities-for-UK-Exports-across-Different-Sectors-and-Destinations-Full.pdf> [Accessed July 2022]. Source adapted.
- Text B** Gov.UK, 2022. *New Bill to enable implementation of Australia and New Zealand trade deals*. [online] 11 May. Available at: <https://www.gov.uk/government/news/new-bill-to-enable-implementation-of-australia-and-new-zealand-trade-deals#:~:text=The%20UK%2DAustralia%20Agreement%20is,economy%20by%20%C2%A3800-%20million> [Accessed July 2022]. Source adapted. Contains public sector information licensed under the Open Government Licence v3.0.
- Partington, R., 2021. UK-Australia trade deal is more golden duck than golden goose. *The Guardian*, [online] 17 December. Available at: <https://www.theguardian.com/business/2021/dec/17/uk-australia-trade-deal-is-more-golden-duck-than-golden-geese> [Accessed July 2022]. Source adapted. Courtesy of Guardian News & Media Ltd.
- Text C** Gov.UK, 2021. *Net Zero Strategy: Build Back Greener*. [pdf online] Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1033990/net-zero-strategy-beis.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1033990/net-zero-strategy-beis.pdf) [Accessed August 2022]. Source adapted. Contains public sector information licensed under the Open Government Licence v3.0.
- Table 1** Office for National Statistics, 2023. *Understanding the UK economy*. [online] Available at: <https://www.ons.gov.uk/economy/nationalaccounts/articles/dashboardunderstandingtheukeconomy/2017-02-22> [Accessed August 2022]. Source adapted. Contains public sector information licensed under the Open Government Licence v3.0.
- Table 2** Office for National Statistics, 2022. *Data Set Balance of Payments*. [online] 30 June. Available at: <https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/datasets/balanceofpaymentsstatisticalbulletintables> [Accessed August 2022]. Source adapted. Contains public sector information licensed under the Open Government Licence v3.0.

- Figure 1** World Bank Group, 2023. *Official exchange rate (LCU per US\$, period average) - United Kingdom*. Available at: <https://data.worldbank.org/indicator/PA.NUS.FCRF?locations=GB> [Accessed August 2022]. Source adapted. Public domain.
- Text D** Bertelsmann Stiftung, BTI 2022 *Country Report — Philippines*. Gütersloh: Bertelsmann Stiftung, 2022. This work is licensed under a Creative Commons Attribution 4.0 International License.
- World Bank. 2022. *Philippines Economic Update, June 2022: Strengthening the Digital Economy to Boost Domestic Recovery*. Philippines Economic Update. © Washington, DC. <http://hdl.handle.net/10986/37915> License: CC BY 3.0 IGO.
- Philippine Statistics Authority, 2022. *Revised Annual 2021 to 2022 National Accounts of the Philippines*. [online] Available at: [https://psa.gov.ph/statistics/national-accounts?gl=1\\*1um2olc\\*\\_ga\\*NTkxODU3MjE1LjE3MTcwMDE0OTg.\\*\\_gaEGEWF45N3M\\*MTcxNzAwMTQ5Ny4xLjEuMTcxNzAwMTU4MC41Ni4wLjA](https://psa.gov.ph/statistics/national-accounts?gl=1*1um2olc*_ga*NTkxODU3MjE1LjE3MTcwMDE0OTg.*_gaEGEWF45N3M*MTcxNzAwMTQ5Ny4xLjEuMTcxNzAwMTU4MC41Ni4wLjA). [Accessed June 2024].
- World Bank Group, 2019. *Philippines – Country Partnership Framework for the Period July 2019 – December 2023 (English)*. [pdf online] Washington, D.C.: World Bank Group. Available at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/891661574699296055/philippines-country-partnership-framework-for-the-period-july-2019-december-2023> [Accessed August 2022]. Source adapted.
- Text E** Acosta, P.A., Posarac, A. and Velarde, R.B., 2016. *Philippines – Completion report for the technical assistance : impact evaluation of the Philippines CCT program (English)*. [pdf online] Washington, D.C.: World Bank Group. Available at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/490961479823019354/philippines-completion-report-for-the-technical-assistance-impact-evaluation-of-the-philippines-cct-program> [Accessed February 2023]. Source adapted.
- Nichols, Z., 2022. *Combating Poverty in the Philippines*. [online] Available at: <https://borgenproject.org/tag/poverty-in-the-philippines/#:~:text=From%202015%20to%202020%2C%20the,eradicate%20extreme%20poverty%20by%202040> [Access July 2022]. Source adapted.
- Text F** World Bank Group, 2019. *World Bank Philippines - Country Partnership Framework for the Period July 2019 - December 2023 (English)*. [pdf online] Washington, D.C.: World Bank Group. Available at: <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/891661574699296055/philippines-country-partnership-framework-for-the-period-july-2019-december-2023> [Accessed August 2022]. Source adapted.
- Table 3** World Bank Group, 2023. *Inflation, consumer prices (annual %) – Philippines*. [online] Available at: <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?locations=PH> [Accessed February 2023]. Source adapted. CC BY-4.0.
- Table 4** World Bank Group, 2023. *Inflation, consumer prices (annual %) – Philippines*. [online] Available at: <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?locations=PH> [Accessed February 2023]. Source adapted. CC BY-4.0.
- United Nations Development Programme, 2022. *Philippines*. [online] Available at: <https://hdr.undp.org/data-center/specific-country-data#/countries/PHL> [Accessed February 2023]. Source adapted. CC BY-3.0 IGO.
- Table 5** Philippine Statistics Authority, 2022. *Revised Annual 2021 to 2022 National Accounts of the Philippines*. [online] Available at: [https://psa.gov.ph/statistics/national-accounts?gl=1\\*1um2olc\\*\\_ga\\*NTkxODU3MjE1LjE3MTcwMDE0OTg.\\*\\_gaEGEWF45N3M\\*MTcxNzAwMTQ5Ny4xLjEuMTcxNzAwMTU4MC41Ni4wLjA](https://psa.gov.ph/statistics/national-accounts?gl=1*1um2olc*_ga*NTkxODU3MjE1LjE3MTcwMDE0OTg.*_gaEGEWF45N3M*MTcxNzAwMTQ5Ny4xLjEuMTcxNzAwMTU4MC41Ni4wLjA). [Accessed June 2024]. Source adapted.
- Figure 2** World Bank Group, 2023. *Net official development assistance and official aid received (current US\$) – Philippines*. [online] Available at: <https://data.worldbank.org/indicator/DT.ODA.ALLD.CD?locations=PH> [Accessed August 2022]. Source adapted. Public domain.