

IB DIPLOMA PROGRAMME

Jeremy Lai

**2023
Edition**

55 EXCELLENT ECONOMICS ESSAYS

**Reference essays for succeeding
in IB DP Economics**

Highlights

- Model answers to REAL IB Economics exam questions
- Detailed writing guide for acing the 10-mark and 15-mark questions in Paper 1, Paper 2 (**NEW**) & Paper 3 (**NEW**)
- Whole syllabus coverage (Microeconomics, Macroeconomics, The Global Economy)
- Top tips for writing a level 7 response
- Written for the latest syllabus (First Assessment 2022)

For my VSA Economics Students:

Alan, Bobby, Corrine, Emme, Heiley, Jason, Justin, Miracle, Mena, Nicholas, Saesha, Sophie, Tiffany, Victor, Zoe. (Class of 2023)

It was a wonderful journey together and I wish all of you the very best for your future endeavors.

For James, Matthew, Alric and Meeti

Thank you for being such wonderful and supportive colleagues!

*March 2023
Hong Kong*

Introduction

55 Excellent Economics Essays- Reference essays for succeeding in IBDP Economics is a learning and teaching resource for students and teachers going through the Economics course in the IB diploma. The 55 essays cover all the major topics found in Paper 1, Paper 2 and Paper 3 and serves as a very good reference resource for end of unit review and self-study prior to the exam. Ideally, students should attempt the question first and compare the finished essay against those found in this book.

These essays are answers to IBDP Economics past paper questions. Each question has been paraphrased lightly (keeping all command terms in place) for copyright reasons and students should always refer to the original question for a clear understanding of the question asked. The source can be found at the end of each question where the year, the session, time zone (TZ) and level are specified.

About the Author

Jeremy Lai is a Secondary Deputy Principal at Victoria Shanghai Academy in Hong Kong where he teaches IB DP Economics, Business Management, Theory of Knowledge and MYP Individuals and Societies. He is the author of *IB Business Management Paper 1 Q&A Pack (2022)*, *54 Excellent Economics Essays (2019)* and *IB HL Economics 55 Worksheets Pack*. He has a BA (Hon) degree in Philosophy, Politics and Economics (PPE) from the University of Oxford and a Masters of Education & PGDE from the University of Hong Kong. He is a British Council Alumni Awards Finalist.

Email: jeremyck.lai@gmail.com

Contents

Paper 1 Microeconomics Essays

Essay	Title
1	<i>Resources are relocated in a market via changes in price. Explain how this is done (10) (May 2015 TZ1 +TZ2 HL)</i>
2	<i>Explain why a government might set a price ceiling (maximum price) on a good. Provide two reasons in your answer. (10 marks) (IB Specimen Paper SL for May 2022 first assessment)</i>
3	<i>Discuss the consequences of a price ceiling on stakeholders with the use of real-world example. (15 marks) (IB Specimen Paper SL for May 2022 first assessment)</i>
4	<i>Firms are supported <u>and</u> equity is promoted through government intervention. Explain how this is achieved by explaining one policy for each of them. (10 marks) (May 2022 SL)</i>
5	<i>A government imposed indirect tax on a particular good have impacts on stakeholders. Evaluate these impacts and use real-world examples in your answer. (May 2022 SL)</i>
6	<i>“The incidence of an indirect tax depends on the price elasticity of demand and the price elasticity of supply.” Explain how this is possible. (10) (May 2016 TZ1 HL).</i>
7	<i>“The consumption of merit goods, such as healthy food, can lead to positive externalities of consumption.” Explain why this is the case. (10) (May 2017 TZ1 SL)</i>
8	<i>“Advertising by the government is the most appropriate way of increasing consumption of a merit good.” Discuss whether this is true. (15) (May 2017 TZ1 SL)</i>
9	<i>The existence of positive externalities of consumption would lead to allocative inefficiency and hence a welfare loss. Explain why this is the case. (10 mark) (Nov 2022 HL)</i>
10	<i>A government might adopt policies to respond to a market situation in which significant asymmetric information exists. Evaluate such policies and use real-world examples in your answers. (15 marks) (Nov 2022 HL)</i>
11	<i>A government might respond to the existence of asymmetric information in a market. Explain two ways the government could do so. (10 marks) (IB Specimen Paper HL for May 2022 first assessment)</i>

- 12 *There are different approaches to managing common access resources. Evaluate them and support your answers with real-world examples. (15 marks) (IB Specimen Paper HL for May 2022 first assessment)*
- 13 *Explain the differences between decreasing returns to scale and the law of diminishing returns. (10) (May 2013 TZ2 HL)*
- 14 *Perfect competition and monopolistic competition are different. Distinguish between them. (10 Marks) (May 2022 HL)*
- 15 *Large firms have significant market power. Discuss the impact of this and use real-world examples in your answers. (May 2022 HL)*

Paper 1 Macroeconomics Essays

Essay	Title
16	<i>The income, output and expenditure methods are used to measure real gross domestic product (GDP). Explain how this works. (10) (May 2014 TZ2 SL)</i>
17	<i>Explain two tools that is available to a central bank to conduct expansionary monetary policy. (10 marks) (IB Specimen Paper HL for May 2022 first assessment)</i>
18	<i>Monetary policy is used to achieve low unemployment. Evaluate its effectiveness and use real-world examples in your answer. (15 marks) (IB Specimen Paper HL for May 2022 first assessment)</i>
19	<i>Monetary policy is used to achieve low inflation. Evaluate its effectiveness and use real-world examples in your answer. (15 marks) (IB Specimen Paper HL for May 2022 first assessment)</i>
20	<i>Explain the possible impact of a rise in government spending on economic growth by using the concept of the Keynesian multiplier. (10) (May 2015 TZ2 HL)</i>
21	<i>Explain two possible causes of deflation. (10 marks) (IB Specimen Paper SL for May 2022 first assessment)</i>
22	<i>A high rate of inflation may negatively affect both a country's export competitiveness and the level of capital investment by firms. Explain why this is the case. (10) (May 2017 TZ1 HL)</i>
23	<i>Distinguish between the following types of unemployment: structural and demand-deficient unemployment. (10) (November 2015 TZ0 HL)</i>
24	<i>Explain what the meaning of natural rate of unemployment is. (10) (May 2015 TZ1 HL)</i>

- 25 *There exists potential trade-off between unemployment and inflation. Discuss them and use real-world examples in your answer. (15 marks) (Nov 2022 HL)*
- 26 *A sustainable level of government (national) debt is an important macroeconomic objective. Explain why this is the case. (10 marks) (Nov 2022 HL)*
- 27 *Supply-side policies might encourage greater domestic competition and improve the international competitiveness of a country. Explain how this works. (10 marks) (May 2022 SL+ HL)*
- 28 *“The use of interventionist supply-side policies is the most effective way of reducing a country’s rate of unemployment.” Evaluate this view and use real-world examples in your answer. (15 marks) (May 2022 SL+ HL)*
- 29 *“The market system may not result in an equitable distribution of income.” Explain why this is the case. (10) (May 2013 TZ1 HL)*
- 30 *Explain why the economy will always return to the full employment level of output following a recession with the use of the monetarist/new classical model. (10) (November 2015 TZ0 HL)*

Paper 1 The Global Economy Essays

- | Essay | Title |
|--------------|--|
| 31 | <i>A currency depreciation might affect a country’s current account balance. Explain how this is the case. (10 marks) (IB Specimen Paper HL for May 2022 first assessment)</i> |
| 32 | <i>A persistent current account deficit may have possible implications. Discuss them and use real-world examples in your answer. (15 marks) (IB Specimen Paper HL for May 2022 first assessment)</i> |
| 33 | <i>The value of a currency in a floating exchange rate system can be influenced by different factors. Explain two of them. (10 marks) (IB Specimen Paper SL for May 2022 first assessment)</i> |
| 34 | <i>There are consequences of a fall in a country’s exchange rate. Discuss them and use real-world examples in your answer. (15 marks) (IB Specimen Paper SL for May 2022 first assessment)</i> |
| 35 | <i>Explain how a common market is different from a free trade area. (10 marks) (Nov 2022 HL)</i> |
| 36 | <i>A country decides to remain a member of a trading bloc. Evaluate this decision and use real-world examples in your answer. (15 marks) (Nov 2022 HL)</i> |

- 37 *There exists advantages and disadvantages for a country of being a member of a trading bloc. Discuss them and use real-world examples in your answer. (15 marks) (May 2022 HL)*
- 38 *In accordance to the theory of comparative advantage, countries often specialized and trade. Explain the limitations of this approach. (10 marks) (May 2022 HL)*
- 39 *Political and social factors can act as barriers to economic growth and development. Explain how this is the case. (10 marks) (May 2022 HL)*
- 40 *A country's economic growth and economic development is affected by economic barriers. Discuss the significance of such barriers and use real-world examples in your answer. (15 marks) (May 2022 HL)*

Paper 2 15-mark Essays (THE GLOBAL ECONOMY)

Essay	Title
41	<i>Discuss methods that the Nigerian government might employ to achieve greater economic growth and/or economic development. Use information from the text/data and your knowledge of economics in your answer. (Q1g Official IB Specimen Paper HL+SL)</i>
42	<i>Discuss possible economic outcomes for economic growth and economic development that might arise from Mexico's current international trade prospects. Use information from the text/data and your knowledge of economics in your answer. (Q2g Official IB Specimen Paper HL +SL)</i>
43	<i>Discuss the view that trade with Japan is more beneficial for Vietnam's economic development than foreign direct investment (FDI) from Japan. Use information from the text/data and your knowledge of economics in your answer. (Q1g May 2022 HL)</i>
44	<i>Evaluate the government's policies to promote economic growth and economic development in Malawi. Use information from the text/data and your knowledge of economics in your answer. (Q2g May 2022 HL)</i>
45	<i>Discuss the likely economic effects on North Macedonia of its entry into the European Union (EU) Common Market. Use information from the text/data and your knowledge of economics in your answer. (Q1g May 2022 SL)</i>
46	<i>Evaluate the impact of government intervention in promoting economic growth and economic development in Sierra Leone. Use information from the text/data and your knowledge of economics in your answer. (Q2g May 2022 SL)</i>

- 47 *Evaluate the effectiveness of the government's macroeconomic policies in achieving economic growth and economic development in Uruguay. Use information from the text/data and your knowledge of economics in your answer. (Q2g Nov 2022 SL)*
- 48 *Discuss the different barriers to economic growth and to economic development faced by Tanzania. Use information from the text/data and your knowledge of economics in your answer. (Q1g Nov 2022 HL)*
- 49 *Discuss the impact of the proposed IMP conditions (Text F, paragraph 1) on Lebanon's economic growth and economic development. Use information from the text/data and your knowledge of economics in your answer. (Q2g Nov 2022 HL)*

Paper 3 10-mark Essays (THE GLOBAL ECONOMY)

Essay	Title
50	<i>Recommend a policy which could be introduced by the government of Country X in response to the expected fall in the world price of coffee. Use the data provided and your knowledge of economics in your answer. (Q1b Official IB Specimen Paper HL)</i>
51	<i>Recommend a policy which the New Zealand government could introduce to address the over-consumption of sugary drinks. Use the data provided and your knowledge of economics in your answer. (Q2b Official IB Specimen Paper HL)</i>
52	<i>Recommend a policy which could be introduced by the government of Burundi to reduce income inequality in Burundi. Use the data provided and your knowledge of economics in your answer. (Q1b May 2022 HL)</i>
53	<i>Recommend a policy which could be introduced by the government of India in order to address the problem of traffic congestion in New Delhi. Use the data provided and your knowledge of economics in your answer. (10 marks) (Q2b May 2022 HL)</i>
54	<i>Recommend a policy that may be implemented to reduce the contribution of emissions the aviation industry makes to global warming. Use the data provided and your knowledge of economics in your answer. (10 marks) (Q1b Nov 2022)</i>
55	<i>Recommend a policy that the government of Turkey could introduce to reduce income inequality. Use the data provided and your knowledge of economics in your answer. (10 marks) (Q2b Nov 2022)</i>

IBDP Economics Paper 1 Writing Guide

In the IB DP Economics Paper 1 exam, students are required to do two sets of questions; one each for microeconomics and macroeconomics in 1.5 hours. Each set of questions are separated into two parts: part (a) and part (b). The marks allocated to each part are 10 marks and 15 marks respectively. A guide to answering both questions is outlined below.

Part (a) 10-mark question

This question is test of knowledge and understanding which is why the vast majority of questions start or includes the command word “Explain”. Many students fail to do well in this question as they only state or describe the subject content without fully explaining the underlying concepts.

According to the IB, the definition of the command word “*Explain*” is “*Give a detailed account including reasons or causes*”. Explaining requires breaking down the underlying processes at work and show how it fits all together with one component affecting the next. It is useful to imagine the economic processes as a car engine and you are a mechanic required to break down each component and show how it works.

The answer to the following question will be used to outline different parts of the Part (a) 10-mark question.

Explain why the consumption of merit goods, such as healthy food, can lead to positive externalities of consumption. (May 2017 TZ1 SL)

As soon as students see this question, they should be able to identify that it is related to the big topic of market failure and one of the eight market failures covered in IB Economics: positive externalities of consumption. Since the questions mentions healthy food, an appropriate example should be given and the students should know exactly which diagram to draw.

The question asks students to “Explain why”. The word “why” is to provide reasons and conjunctions such as “because” should be used. Having this mind will ensure that the student is answering the question directly.

Essay Structure

1) Defining the key words

Defining the keywords is a very good way for students to set the scene and develop the next stage of the answer. The keywords are economic terms which are important to answering the question. In the question above, the terms “merit goods” and “positive externalities of consumption”.

Sample Answer

A- Merit goods are as goods and services considered to be desirable by consumers but are underprovided when relied on the market for provision. The consumption of merit goods generates positive externalities which are benefits imposed on unrelated third party as a result of its consuming such goods.

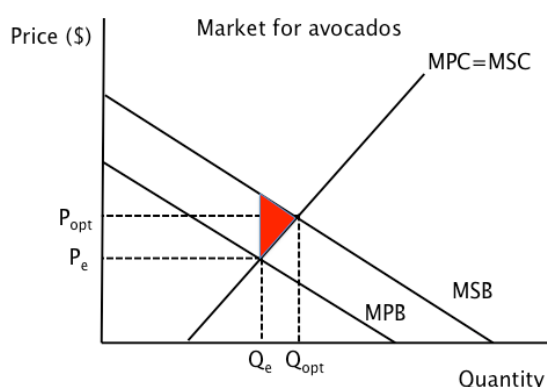
It is important to define the terms accurately. For example, many students define positive externalities as simply “benefits to other people” which is not accurate enough as it is a benefit to “unrelated third parties”. Defining the key terms accurately is very important as it is the first impression the examiner has to whether this will be a high quality answer. An excellent set of definitions would not simply define the terms separately, and would try to link the definitions together so to enhance the context of the answer. In the written sample above, whilst the definitions of merit goods and positive consumption externality could have been provided separately, the author has linked the two concepts together by stating that merit goods lead to positive consumption externalities.

2) Drawing a diagram

Models are expressed and studied extensively in Economics. In IB DP economics, the vast majority of these models are expressed graphically and the candidate should be able to explain the mechanisms of the economic theory using diagrams.

A good diagram needs the following

- 1) Clearly labeled axis with units
- 2) Correct demand, supply and other lines
- 3) Clearly labeled equilibrium price, quantity or any other important values.
- 4) A title is not necessary but is sometimes useful to show the examiner what the student is trying to represent.



In the diagram above, I have used acronyms for labels such as MPC and MSC which is fine as long as I have stated the terms in full in my answer. Whilst it would have been fine to use P_1Q_1 to denote the allocative equilibrium, note that I have made the examiner's job much easier by labeling them P_{opt} and Q_{opt} to denote the optimum price and quantity.

3) Analysis and Explanation.

This part of the essay is where the question is directly addressed. It requires using the student to explain the underlying economic theory using the diagram as an aid. The mechanism of how it fits together should be clearly discussed together with causes and effects. Appropriate real-world examples should be used to enhance the level of authenticity to the answer. Useful keywords to use in this section are "because", "therefore" and "lead to".

Sample Answer

B- Avocados is regarded as a kind of “super food” due to the antioxidants it provides through consumption which makes people healthier and more energetic in general. The graph above represents the market for avocados where it is assumed the marginal private cost (MPC) equals the marginal social cost (MSC). When left to market forces, only Q_e amounts of avocados are consumed as people only take into account of the marginal private benefits accrued to them. This includes a healthier and more energetic body which will allow them to be more productive in the work place and may allow them to earn levels of higher income in the long run. As microeconomic theory assumes people to be self-interested, people do not take into account the positive externalities created via the consumption of avocados.

C- Regardless of whether such externalities are being taken into account, the consumption of merit goods will benefit unaccounted third parties. The consumption of healthy foods such as avocados will likely lead to higher levels of worker productivity which in turn will increase the profitability of their companies. This in turn may lead to a more vibrant and productive economy. Such companies are considered unaccounted third parties as they did not have to pay to enjoy any of the benefits.

D- In light of such external benefits, society would prefer consumers to operate along the marginal social benefit (MSB) curve where Q_{opt} quantities of avocados are demanded at the equilibrium. At Q_{opt} , other parties will still benefit from the merit goods indirectly but such benefits are no longer considered positive externalities since consumers now account for them in their decision-making. Q_{opt} is the allocative efficient quantity where there is no welfare loss. Should consumers consume at Q_e , MSB is still greater than MSC which means that there are welfare gains yet to be enjoyed. This is regarded as a deadweight loss to society and represented by the shaded area.

In paragraph B and C, the example of avocados is used as the question explicitly mentions healthy foods. The avocado market is depicted diagrammatically and the question is addressed directly via making the distinction between private and external benefits. The significance of unaccounted third parties and the benefits enjoyed are clearly highlighted as

they are a critical feature of positive consumption externalities. Notice that the words “Regardless” and “In light of” were used at the start of paragraph C and D to contextualise my answer and drive the argument forward.

Notice that the question uses the word “may” and an astute student could demonstrate deeper understanding by addressing scenarios where would not lead to positive externalities of consumption. This was the approach adopted in paragraph D where the social optimum was discussed.

There is a temptation for students to simply describe the diagram without answering the question directly. Remember that the diagram is only a tool to help you answer the question. Another common error is to associate the impact of the economic phenomena to the diagram. For example, when income rises, many students will write the following:

Increasing income will lead to a rightward shift to the demand curve.

This is a colloquial or even inaccurate way of answer because what is happening in the real-world (increasing income) is separate from the model (the demand curve). The real-world phenomenon should not be used to explain the model. A more formal answer would be:

Increasing income will lead to an increase in quantity demanded at each and every price level. Graphically, this is shown by a rightward shift in the demand curve.

4) Conclusion

The conclusion should be a very brief summary of your answer and to highlight the key points. One or two sentences should suffice.

Sample Answer

D- The consumption of merit goods can lead to positive externalities of consumption as external benefits are generated in the consumption process e.g. eating avocados make

healthier workers. Such benefits are positive consumption externalities as they are not taken into account by consumers in their decision-making and benefiting parties did not have to pay for them.

Part (b) 15-mark question

Similar to the 10 mark question, the 15 mark question is found in part b of Paper 1 and students are required to do one such questions which could come from anywhere in the syllabus. There is definitely one question on each of the major topics of Microeconomics, Macroeconomics and The Global Economy.

The 15-mark question is much more sophisticated than the 10 mark question as it often requires the student to exercise evaluating skills and make well-reasoned and argued judgments. The following are some of the most common command words found in 15 mark questions as described by the IB.

Command Terms

Evaluation- Make an appraisal by weighing up the strengths and limitations.

Discuss- Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.

Examine- Consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.

Compare and Contrast- Give an account of the similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.

The common skill underlying the command terms above is “*contextualization*”. To contextualise is to acknowledge the actual situation and make judgments based on those situations rather than generically. Many students fall in the trap of simply putting forward the advantages and disadvantages of the issue as a way of exercising evaluative skills. Doing so is just a form of “listing” and lacks the sense of sophistication needed for a higher level answer.

For example, when asked to discuss the effectiveness of using advertising to increase the consumption of merit goods, many students may say it is effective because it is persuasive or ineffective because it is expensive. They would make a list for both sides and wrap up with a conclusion without providing the reasons why the position was adopted.

To contextualise is to put forward the conditions to when it may be effective or ineffective. For example, whether advertising is effective will depend on whether on the affordability of the merit good. If under consumption is due to affordability, then advertising will be ineffective regardless of its persuasiveness. The channels of advertising are equally important. If the target audience are teenagers, advertising on social media channels may be more effective than more traditional print advertising. Indeed, advertising may be expensive but if the government is very wealthy e.g. Hong Kong, then they would not have a problem in funding the advertising.

The following are some phrases which allow students to demonstrate evaluation and contextualisation.

- 1) *The long run and short run impacts are different. In the long run...in the short run...*
- 2) *Whether xyz happens DEPENDS on ABC*
- 3) *It is important to note that...*
- 4) *This begs the question whether...*
- 5) *The key question to answer is....*
- 6) *On balance, whether abc is this depends.*
- 7) *The effectiveness of this policy...*

The essay structure for a 15-mark question is similar to a 10 mark question but it is important to address the question early on in the essay. Many students spend a lot of time defining terms, drawing and explaining the diagrams without clearly addressing the question. Everything should be done with a purpose and the examiner should feel that the student is answering the question directly instead of regurgitating content and have examiners to second guess their intentions.

All questions start with the phrase “Using real-world examples” which means that you must also illustrate your answer with examples throughout! The example should be discussed in an in depth manner and show how it applies to the point put forward. A good real-world example should have a 1) a date 2) a location and if application 3) relevant statistics.

Since the 15 mark question is always found in part b to the paper 1 question and phrased as a follow on question from part (a), students do not need to necessarily repeat content or diagrams already covered in part (a). They can simply refer to it in part b of the question. However, if adjustments are made to the diagram e.g. adding an extra curve, then the diagram should be redrawn for clarity.

IBDP Economics Paper 2 15-Mark Questions Writing Guide

The 15-mark question in the Paper 2 exam is very similar to the 15-mark question in Paper 1 where evaluative and synthesis skills are required.

However, it is important to note that all questions start with the phrase “Using information from the texts/data and your knowledge of economics”. This means that it is critical to use information from the text to back up your points and used to formulate reasoned arguments. Many questions (if not all) provide statistics about the country and those can be incorporated in the answer very easily.

Another aspect to look out for is that the question often asks how a policy, an event would affect the country’s economic growth and economic development. A great answer would need to address both, especially in cases where economic growth is achieved but not necessarily economic development e.g. existence of sweatshops may increase the income of the local population but worsens their welfare due to the poor working conditions.

IBDP Economics Paper 3 10-Mark Questions Writing Guide

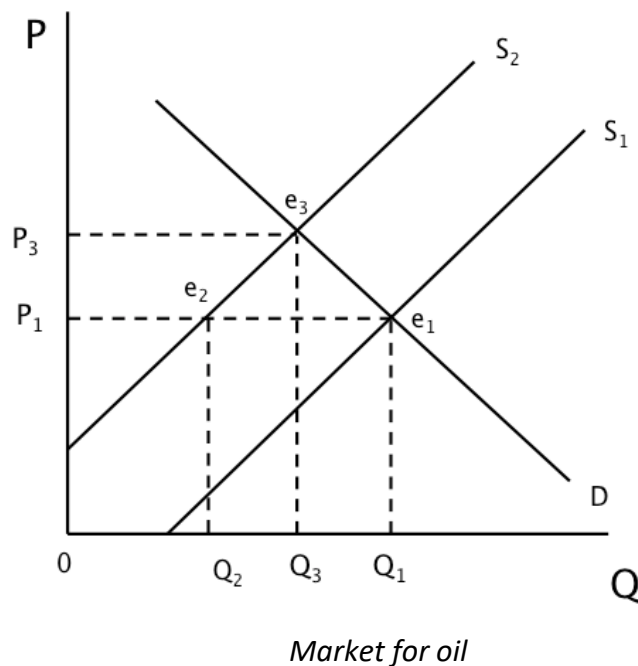
The 10-mark question appears as the last part of every question. It is a policy question which requires the student to suggest a policy to overcome an economic problem the country is facing in the text.

Different from Paper 1 and 2, a specific writing box with 20 lines is provided for the answer to be written in. This means that it is possible to score full marks by just using the space provided. In the spirit of performing primary research, I counted the number of words for students with “average” handwriting and discovered that the space can fit approximately 340 words and students. This means that the student would need to explain, evaluate and synthesize the proposed policy in that many words, meaning that the response should be written in a very clear and concise manner. No diagram is needed unless specified.

Something that is quite confusing is that the question asks specifically for one policy (note the use of ‘a’) but yet the mark scheme often allows “a combination of policies”. I would recommend against writing two different policies but could mention a second one if it is used to complement the first one or to make it more effective e.g. the use of advertisements to complement taxes in reducing negative consumption externalities.

Essay 1 (Paper 1)***Resources are relocated in a market via changes in price. Explain how this is done (10)******(May 2015 TZ1 +TZ2 HL)***

The condition of scarcity means that choices in the allocation of resources have to be made. More specifically, the allocation of resources is a choice of what and how to produce; the latter which involves a choice about which and how much of the underlying resources will be directed to the production of the chosen goods and services. In a competitive market structure, a change in price; caused by the changing dynamics of demand and supply, reallocates resources via the two functions it serves.



Price serves a signalling function as changes in price signals to buyers and sellers of whether to enter or leave the market. In the diagram above, the supply of oil has decreased due to a supply shock in the form of warfare in politically unstable regions such as the Middle East. As a result, supply of oil decreased as reflected by a leftward shift in the supply curve from S_1 to S_2 . At the existing price level P_1 , there is excess demand of $Q_1 - Q_2$ where Q_1 is the quantity demanded and Q_2 is the quantity supplied. As a result of the supply shock, resource allocation for the production of oil has temporarily decreased to

where Q_2 amounts of oil is being produced despite the price remaining at P_1 . Observing the excess demand and the capacity for prices to be increased, some suppliers will raise the price up to P_3 where the market clears. This simultaneously sends contrasting signal to the suppliers to enter the market and increase the quantity supplied from Q_2 to Q_3 and for consumers to buy less and decrease the quantity demanded (Q_1 to Q_3). When considering the situation from the original equilibrium e_1 , a higher price has reallocated resources away from the production of oil as only Q_3 is being produced as opposed to Q_1 . Less machinery, human capital and other inputs used to make the oil is being employed.

The incentive function of price is the reason why an increase in price will send a signal to suppliers to enter the market and for consumers to leave the market. As well as reflecting the relative degree of scarcity, price serves as an indicator of the potential gains to be made. In the example above, a higher price P_3 incentivises suppliers to increase quantity supplied from Q_2 to Q_3 as more revenue and profit can be gained by getting more for each unit sold *ceteris paribus*.

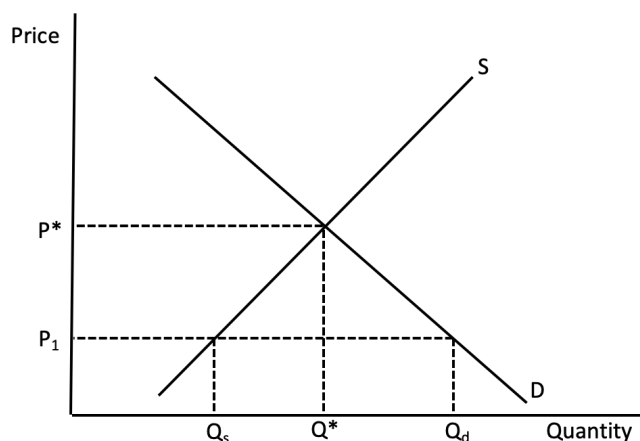
The above example mainly shows how prices reallocate resources from a scarcity perspective as only supply is being affected but it can also reallocate resources from a desirability perspective. For example, a change in taste or increase in income will lead to the increase in demand for a good or service and hence lead to an increase in price. The signalling and incentive functions operate in a similar way which leads to an increase in quantity supplied as compared to the original equilibrium.

In a competitive market structure, allocation of resources is determined by price. Via the signalling and incentive function, changes in price reflect different levels of scarcity and desirability and hence reallocate resources in a way which balances the forces of demand and supply.

Essay 2 (Paper 1)

Explain why a government might set a price ceiling (maximum price) on a good. Provide two reasons in your answer. (10 marks) (IB Specimen Paper SL for May 2022 first assessment)

A price ceiling is defined as a government mandated maximum price which a good or product could be sold to people. It is usually set below the market equilibrium price.



The government might set a price ceiling for goods and services that are deemed necessities as it may be overpriced and setting a price ceiling will allow the goods and services to be more affordable. In the diagram above, the equilibrium market price for rental housing is at P^* which may be deemed too high and unaffordable for the general public. Hence, the government may implement rent control; setting a price ceiling at P_1 so that it is more affordable for the general public. The quantity demanded, which is defined as the number of consumers that are willing and able to consume will increase from Q^* to Q_d .

Another reason is that the government may want to encourage the consumption of merit goods. By setting a maximum price, the government can ensure that the good or service is set at a low enough level that consumers are encouraged to consume it. Referring to the diagram above, the quantity demanded when the price is at P^* is only Q^* whereas the quantity demanded will increase to Q_d once the price has dropped to P_1 , the price level of where the price ceiling is set. An example of this is India where condoms are only allowed to be sold at a maximum price of 9.15 Rupee to encourage its use in a country that is plagued with high rates of AIDS.

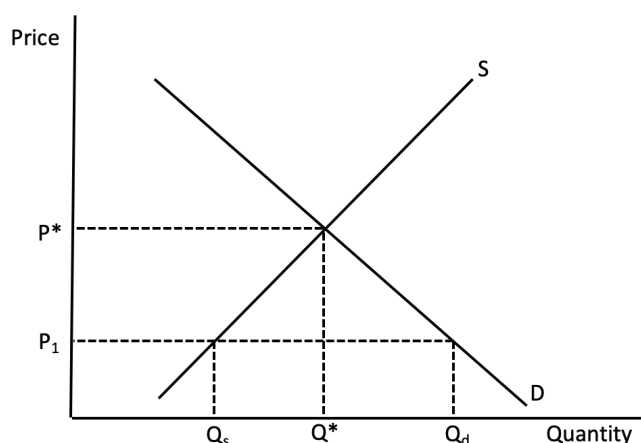
Allowing necessities to be more affordable and encouraging the consumption of merit goods are two reasons why the government may set a price ceiling.

Mr. Lai's notes: even though the use of examples is not required in a 10 mark question, it is very helpful to use them to demonstrate your understanding of the concept.

Essay 3 (Paper 1)

Discuss the consequences of a price ceiling on stakeholders with the use of real-world example. (15 marks) (IB Specimen Paper SL for May 2022 first assessment)

A price ceiling is defined as the maximum price which the government has implemented for a good and service. Stakeholders refer to the parties which are affected by the price ceiling and include producers, consumers, government and society.



Price ceilings benefit some consumers and negatively affect others. As mentioned in part a) the government might set a price ceiling for goods and services that are deemed necessities as it may be overpriced and setting a price ceiling will allow the goods and services to be more affordable. In the diagram above, the equilibrium market price for rental housing is at P^* which may be deemed too high and unaffordable for the general public. Hence, the government may implement rent control; setting a price ceiling at P_1 so that it is more affordable for the general public. The quantity demanded, which is defined as the number of consumers that are willing and able to consume will increase from Q^* to Q_d . However, the quantity supplied drops to Q_s as suppliers are not incentivised to rent out their flats leading to access demand of $Q_d - Q_s$. This is problematic because the price ceiling is not able to help who the government intended to help and there are some people who were willing to pay P^* who would no longer have access to housing. An example of this is public housing in Hong Kong where the average rent is only HKD 1000 per unit but the waiting time to secure a flat is around 5.5 years. As a result, many poor families are forced to live in expensive subdivided

housing with poor living conditions, suffering from poor standards of living and in many cases, health hazards. Those who benefit are those who are first in line to move into the cheap flats.

The extent of this problem depends on the extent to which the Hong Kong government is willing to raise prices (and to price out some poor people) or to increase the supply of public housing. The Hong Kong government has chosen the latter strategy but increasing supply has been hampered by issues relating to procuring suitable land and building enough infrastructure such as roads and public transport networks to support newly built communities. Hence, a direct consequence for the government is that they need to be mentally prepared to increase supply right from the beginning, implying an increase in government spending on the provision of housing.

Furthermore, the creation of black markets will negatively impact consumers and governments. A price ceiling essentially prevents the price mechanism from fully functioning meaning that other forms of non-price allocation will be put into place for allocating rental flats. Waiting in line is the official way but profit seeking tenants may ignore the price ceiling and rent out flats at higher levels to risk taking tenants. This was the case in Hong Kong where some existing tenants engaged in arbitrage but subletting their own public housing at a higher price to desperate tenants and earning the difference. This is fundamentally unfair and defeats the original intention of the price ceiling. Having said that, these subletting only take place on a small scale as a rigorous monitoring system is in place, hence allowing the price ceiling to be largely functioning well.

Producers are negatively affected as their prices are reduced from P^*Q^* to P_1Q_1 due to the implementation of the maximum price and reduction in quantity supplied. As a result, producers may be disincentive to produce the good, which could seriously impact consumer well-being. After price controls were set in Europe in the 1990s (where pharmaceutical firms can only sell drugs in the public market after the prices are approved by the government), it is estimated that Germany and France only had access to 71% and 46% of the new drugs respectively (US has 90%) and the fall in research and development meant that up to 46 fewer medicines have been introduced into the marketplace. Not to mention the lives that could

have been saved with the availability of these drugs if firms were allowed to earn higher levels of profit. The implantation of the price ceiling may have made drugs more affordable but had the unintended impact of removing availability in the long run. Limiting the scope of innovation would naturally have a negative impact on employment opportunities. It is estimated that price controls have removed 1700 high paying research and development jobs in Europe hence limiting the range of opportunities and synergies that could have been created with highly skilled talents working in the area.

Price-ceilings attempts to help consumers through forcing prices to be lower and at a more affordable level. However, the positive impact of low prices would depend on the government's ability to address excess demand issues and its willingness to bear the negative consequences on firms and employment.

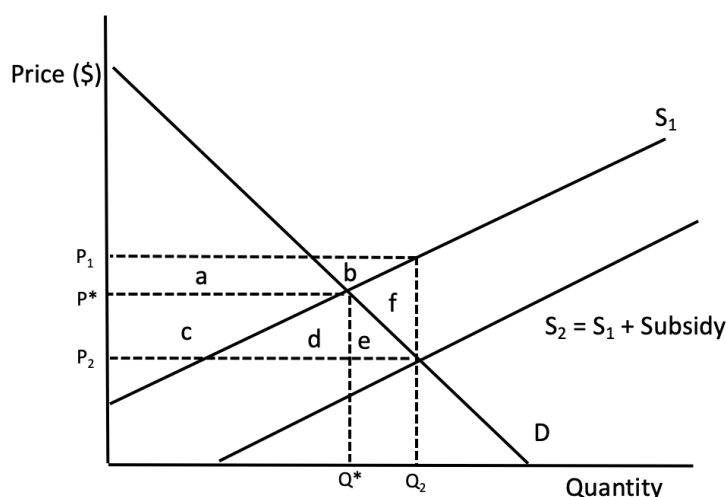
Mr. Lai's notes: the ability to apply an example thoroughly is a differentiator between a Level 6 and Level 7 student. Refrain from just writing two lines as the expectation is for the example to be fully integrated.

Essay 4 (Paper 1)

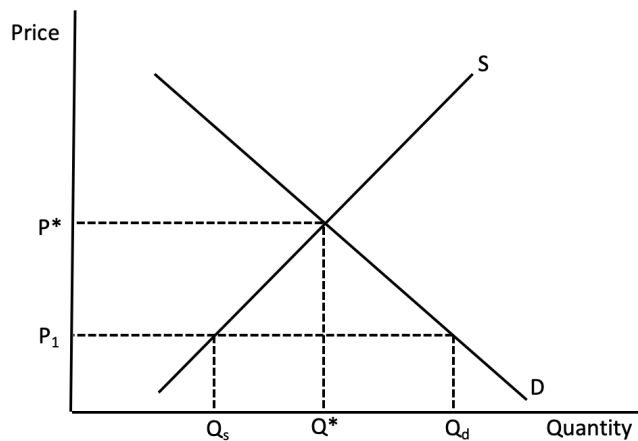
Firms are supported and equity is promoted through government intervention. Explain how this is achieved by explaining one policy for each of them. (10 marks) (May 2022 SL)

Government intervention is defined actions undertaken by the government to achieve certain economic objectives through manipulating and influencing the price mechanism. Equity can be defined as a state of fairness and is often associated with the notion of equality.

One policy that could be used to support firms is providing firms with subsidies. This could be subsidies for hiring staff or the purchase of technologically advanced equipment that could support greater levels of production which is commonly seen for supporting tech start-ups. Providing production subsidies to firms increases the production of goods and services at each and every price level. More can be produced at a lower price. In the diagram above, this is graphically shown by a rightward shift in the supply curve from S_1 to S_2 leading to the equilibrium market price to drop from P_1 to P_2 and the quantity produced to increase from Q_1 to Q_2 . Producers gain as their revenue increases from $P_1 \times Q_2$ to $P^* \times Q^*$ and their producer surplus also gains area $a+b$. The money spent on the subsidy can be seen by area $a+b+c+d+e+f$.



One policy that could be used to promote equity is the implementation of price ceilings. A price ceiling is defined as a government mandated maximum price which a good or product could be sold to people. It is usually set below the market equilibrium price.



The government might set a price ceiling for goods and services that are deemed necessities as it may be overpriced and setting a price ceiling will allow the goods and service to be more affordable. With more being able to afford it, it is deemed more equitable as it is not only accessible by those who are economically able. In the diagram above, the equilibrium market price for rental housing is at P^* which may be deemed too high and unaffordable for the general public. Hence, the government may implement rent control; setting a price ceiling at P_1 so that it is more affordable for the general public. The quantity demanded, which is defined as the number of consumers that are willing and able to consume will increase from Q^* to Q_d . However, as the quantity supplied falls to Q_s there is now excess demand of $Q_d - Q_s$. Prices are more affordable but access to those products is even more difficult ($Q_s < Q^*$) than before. In order to be truly equitable, the government must find ways to increase supply to meet the excess demand.

Introducing subsidies is a way of supporting firms and the implementation of a price ceiling can help promote equity.

Mr Lai's notes: the question asks for two reasons. Therefore, dedicating one paragraph dedicated to each reason with an explicit topic sentence is a good way of approaching this

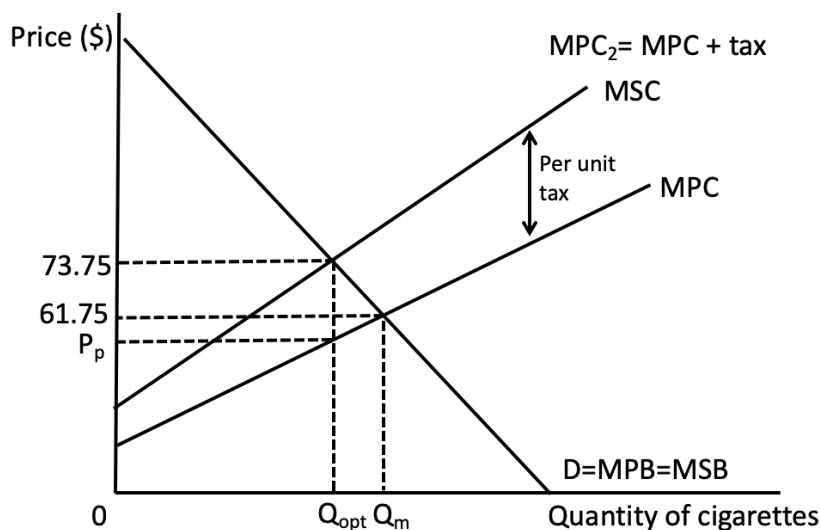
question. For some reason, some students like to merge the two reasons together which makes marking very difficult (and you do not want to do that to the examiner!)

Essay 5 (Paper 1)

A government imposed indirect tax on a particular good have impacts on stakeholders.

Evaluate these impacts and use real-world examples in your answer. (May 2022 SL)

An indirect tax is defined as a tax that is imposed on goods and services which are ultimately borne by both the producer and consumer.



The diagram shows a negative consumption externality in the form of the third-party effects on smoking. It is assumed here that marginal private benefit is the same as marginal social benefit. The market is consuming at Q_m because it is operating along the MPB where consumers are taking into account their own private benefits and they are ignoring the external benefits such as the financial pressure on the government to treat lung related diseases and the loss in labour productivity. Therefore, there is an overconsumption of cigarette smoking and this is graphically shown by Q_m being greater than Q_{opt} . Q_{opt} is regarded as the optimum output from society's point of view because it is where $MSC = MSB$ and all costs and benefits are fully accounted for. In February 2023, the Hong Kong government raised the indirect tax by 31% raising the average prices of cigarettes to \$73.75 per pack. Graphically, this is shown as an upward shift in the MPC curve to MPC_2 . The stakeholder impacts of this indirect tax would be explained in the following.

As a result of the tax, Hong Kong consumers lose as they have to pay a higher price (\$12 dollars more) for consuming cigarettes than before. The quantity of cigarettes would

decrease from Q_m to Q_{opt} (the assumption that the taxes at the exact external cost is to simplify the argument) and the Hong Kong government estimates that around 100,000 smokers would quit smoking over the next 3 years. However, this would depend on how addictive cigarettes are which determines the price elasticity of demand. Whilst consumption might fall in the short term due to the shock of paying much higher prices, some consumers may relent in the long term and continue to smoke. Producers also lose as the taxes make smoking more expensive and reduces the number of smokers i.e. customers in society, not to mention that an increasing portion of their revenue has gone to the government in the form of taxes. Apart from improving the quality of cigarettes, cigarette companies are quite limited in what they can do to attract more business as regulations are in place which forbid them from advertising their products in an open manner and they are legally obligated to wrap their packaging with warning signs and graphic pictures of lung disease.

The government gains and loses depending on what their ultimate aim of setting the tax on cigarettes is. Whilst the Hong Kong government understands the costs of having a proportion of its citizens smoking, it does not disguise its intention to earn extra revenue from cigarette taxes. The Hong Kong government estimated that the tax increase would increase the amount of tax revenue to \$1 billion and allow them to finance health related initiatives such as committing an additional HKD 500 million funding for the Chinese Medicine Development Fund. If, however, the ultimate aim is to bring down the number of smokers, then the government may need to do so in conjunction with other policies such as public education as cigarettes are addictive in nature. In other words, whilst the general society gains as substantial revenue is raised for much-needed government health initiatives, the number of smokers still remains relatively high. The externality may have been internalised through the direct tax as shown by the government above, but tangible issues associated with high levels of lung related diseases are still present.

When the government imposes an indirect tax on cigarettes, the consumers and producers lose whilst the government and society gain through the tax revenue raised and the elimination or minimising of the negative externality.

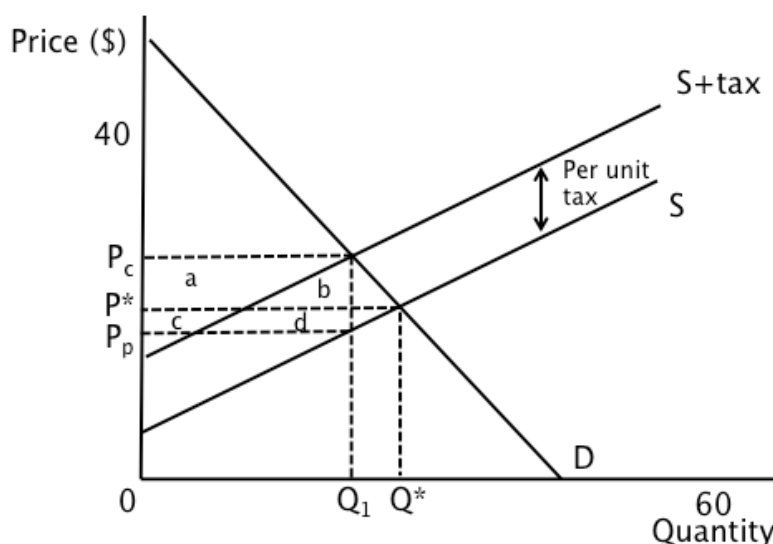
Mr Lai's notes: note that raising government revenue through taxation may not necessarily be the most desired outcome if the aim is to reduce smokers as this conveys that demand for the particular good is inelastic and the tax had limited impact on quantity demanded.

Essay 6 (Paper 1)

“The incidence of an indirect tax depends on the price elasticity of demand and the price elasticity of supply.” Explain how this is possible. (10) (May 2016 TZ1 HL).

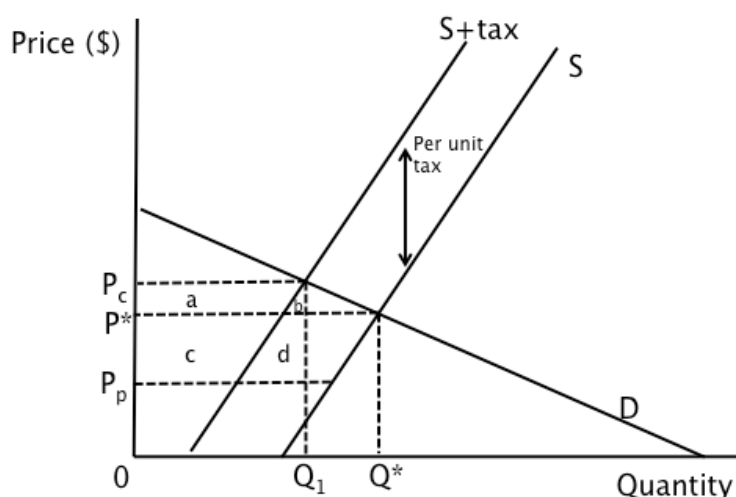
Incidence of tax is defined as the division of tax burden between consumers and producers when an indirect tax has been implemented. The tax under consideration is an indirect tax as defined as a payment paid to the government by a firm but the whole or a part of the tax is passed on to the consumer as part of the price of a good or service.

The incidence of tax depends on the relative price elasticity of demand (PED) to the price elasticity of supply (PES). PED and PES is defined as the responsiveness of the quantity demanded and quantity supplied to a change in price respectively.



In the diagram above, the government implemented a per unit tax of $(P_c - P_p)$ which shifted the supply curve upwards from S to $S + \text{tax}$. The market price increased to P_c and consumers' share of the tax burden is represented by area $a + b$. The effective price received by producers decreased to P_p and their share of the tax burden is shown by area $c + d$. The tax revenue generated is given by $Q_1 \times (P_c - P_p)$ and represented by $a + b + c + d$. Note that the consumer burden is greater than the producer burden as the PED is relatively more inelastic than the PES as conveyed by its steeper slope. By being less price responsive, consumers are more unwilling to reduce their consumption compared to producers in reducing supply as a result of the price changes. This usually refers to goods such as cigarettes which are addictive in

nature and render consumer demand to be less responsive to changes in price. Note that a relatively more inelastic PED is the same as saying a relatively more *elastic* PES. Referring to the same diagram above, it can be argued that producers bear less of the burden because they are more willing to supply less as a result of the drop in effective price received from P^* to P_p . In other words, so long as supply is relatively more inelastic to demand, which is very likely in this case given the elastic PED, then the consumers will bear less of the burden.



The incidence of tax reverses when the PED becomes relatively more elastic than the PES. The consumer burden $a+b$ is less than the producer burden $c+d$. By being more price responsive, consumers are more willing to reduce their consumption compared to producers in reducing supply as a result of the price changes. This usually refers to unbranded goods such as which have many substitutes e.g. bottle water. When prices increase, consumers immediately switch consumption to similar substitutes and hence they do not have to bear as much of the burden. Note that a relatively more elastic PED for an economic situation is the same as stating a relatively more *inelastic* PES. A steeper demand curve is also the same as saying shallower supply curve. Referring to the same diagram above, it can be argued that producers bear more of the burden because they are less willing to supply less goods when the effective price received decreases from P^* to P_p .

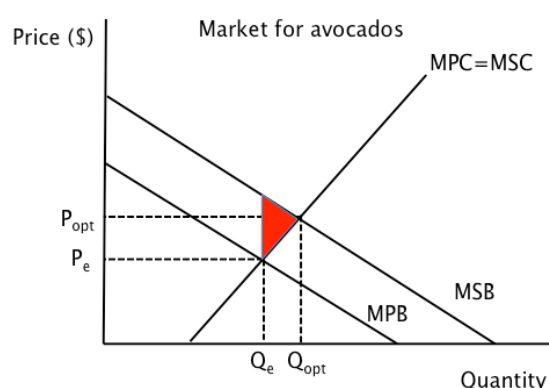
The incidence of tax depends on the relative PED and PES to one another. When PED and PES are equal, the burden will be shared equally between the both of them.

Mr. Lai's notes: a very good question that tests students' understanding of tax incidence and elasticity at the same time. Make sure you know the subject well.

Essay 7 (Paper 1)

“The consumption of merit goods, such as healthy food, can lead to positive externalities of consumption.” Explain why this is the case. (10) (May 2017 TZ1 SL)

Merit goods are goods and services considered to be desirable by consumers but are underprovided when relied on the market for provision. The consumption of merit goods generates positive externalities which are benefits imposed on unrelated third parties as a result of its consuming such goods.



Avocados are regarded as a kind of “super food” due to the antioxidants it provides through consumption which makes people healthier and more energetic in general. The graph above represents the market for avocados where it is assumed the marginal private cost (MPC) equals the marginal social cost (MSC). When left to market forces, only Q_e amounts of avocados are consumed as people only take into account the marginal private benefits accrued to them. This includes a healthier and more energetic body which will allow them to be more productive in the workplace and may allow them to earn levels of higher income in the long run. As microeconomic theory assumes people to be self-interested, people do not take into account the positive externalities created via the consumption of avocados.

Regardless of whether such externalities are being taken into account the consumption of merit goods will benefit unaccounted third parties. The consumption of healthy foods such as avocados will likely lead to higher levels of worker productivity which in turn will increase the profitability of their companies. This may lead to a more vibrant and productive economy.

Such companies are considered unaccounted third parties as they did not have to pay to enjoy any of the benefits.

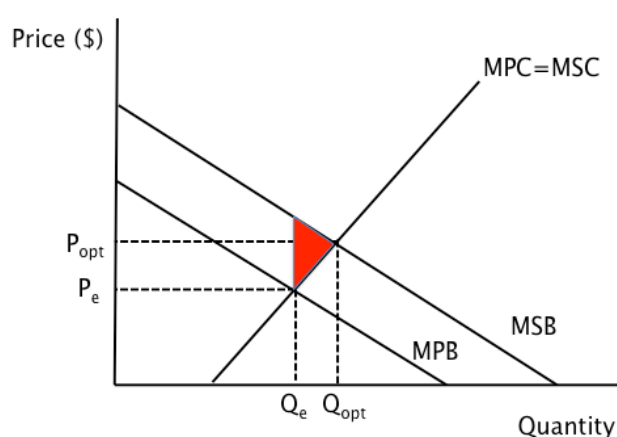
In light of such external benefits, society would prefer consumers to take into account all these external benefits in their decision making. Graphically, the marginal private benefit (MPB) would coincide with the marginal social benefit (MSB) curve where Q_{opt} quantities of avocados are demanded at the equilibrium. At Q_{opt} , other parties will still benefit from the merit goods indirectly but such benefits are no longer considered positive externalities since consumers now account for them in their decision-making. Q_{opt} is the allocative efficient quantity where there is no welfare loss. Should consumers consume at Q_e , MSB is still greater than MSC which means that there are welfare gains yet to be enjoyed. This is regarded as a deadweight loss to society and represented by the shaded area.

The consumption of merit goods can lead to positive externalities of consumption as external benefits are generated in the consumption process e.g. eating avocados make healthier workers. Such benefits are positive consumption externalities as they are not taken into account by consumers in their decision-making and benefiting parties did not have to pay for them.

Essay 8 (Paper 1)

“Advertising by the government is the most appropriate way of increasing consumption of a merit good.” Discuss whether this is true. (15) (May 2017 TZ1 SL)

Merit goods are goods and services considered to be desirable by consumers but are underprovided when relied on the market for provision. Governments at times have attempted to increase the consumption of merit goods using advertising in print, on TV and via the internet to overcome the market failure which exists for merit goods.



The above diagram shows the market for vaccination treatment (VT) which people undergo to be protected against flu viruses. For the purposes of discussion, it is assumed the marginal private cost (MPC) equals the marginal social cost (MSC).

Left to market forces, microeconomic theory assumes that people will only take their own private benefits into account as reflected in the marginal private benefit (MPB) curve where only Q_e quantities of VT are consumed. These private benefits may include their own health and well-being. Market failure has taken place because the social optimum quantities of VT to be consumed is actually Q_{opt} as reflected by the intersection between the marginal benefit (MSB) curve and marginal social cost (MSC) curve. Q_e is less than Q_{opt} because there is no incentive for people to take external benefits attributed to unrelated third parties e.g. more profitable companies due to healthier workers, into account. The deadweight loss to society which describes the net marginal benefits that could be gained is represented by the shaded area.

Advertising can be used to encourage society to undergo more VT by adopting persuasive techniques that appeals to both the factually and emotionally minded. Ideally the increase in consumption will be sufficient to remove the externality and Q_{opt} is consumed. Advertising has been effectively used in Hong Kong in the past as it makes people more well informed of the problems about flu related diseases and benefits of undergoing VT.

However, the effectiveness of advertising to increasing the consumption of a merit good depends on a number of existing factors. First, the merit goods must be affordable or else advertising would not be effective regardless of how persuasive it may be. VT are considered to be very expensive to people living in developing countries such as India. Rather than using advertising only to increase the demand for VT, producer subsidies are given to firms to increase the supply of VT at a lower price. This is especially effective given that poor people are very price elastic and will be much willing to get VT if prices were lower.

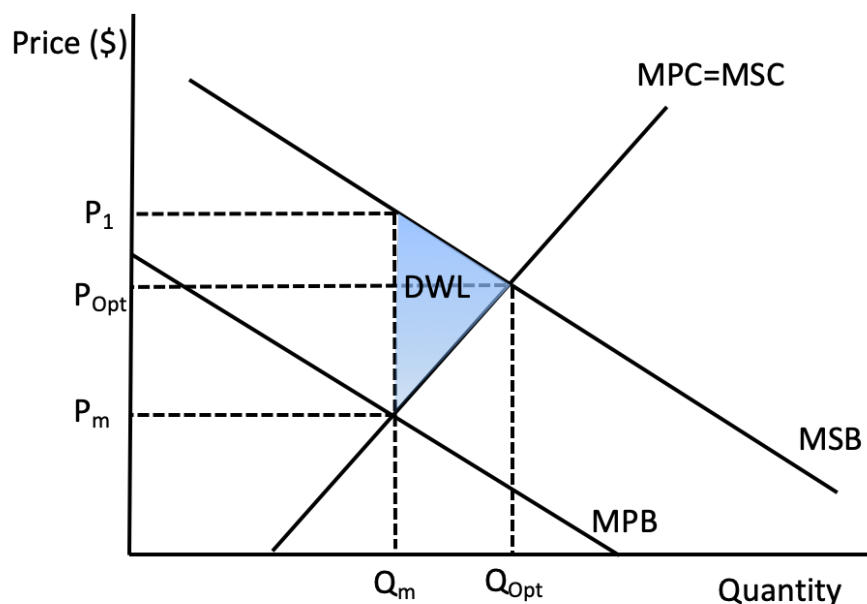
Second, it depends on whether the advertising is convincing enough to persuade people to change their behaviour. There is no guarantee that the advertisement would be seen and the people would necessarily change their consumption behavior. In order to enhance the effectiveness, the government may need to lengthen the advertising campaign and pay for more TV spots or billboards. This may be very costly to the government in the long run, especially if there are many initiatives to promote.

Advertising is one of the ways to promote the consumption of merit goods but may not necessarily be the most effective as it does not directly address the affordability issue and is highly dependent on the quality of the campaign. Its effectiveness would be greatly enhanced when combined with other measures such as the provision of subsidies.

Essay 9 (Paper 1)

The existence of positive externalities of consumption would lead to allocative inefficiency and hence a welfare loss. Explain why this is the case. (10 mark) (Nov 2022 HL)

Positive consumption externalities are defined as positive impacts on third parties which result from the consumption of a good or service. These goods and services are known as merit goods which are considered beneficial by society e.g. education and healthcare services. Allocative inefficiency is defined as producing at a level where social surplus is not maximised and the welfare loss in this case refers to the welfare gains that can be made if the consumer had consumed more.



The diagram shows a positive consumption externality and the consumption of education will be used as an example. It is assumed here that marginal private cost (MPC) is equal to marginal social cost (MSC). The market is consuming at Q_m levels of education because it is operating along the MPB where consumers are only taking into account their own private benefits and ignoring the external benefits that are being imposed on third parties. In the case of education, it provides private benefits to the consumer which includes the intellectual nourishment as well as the skills and knowledge provided to workers hence allowing them to be more productive and potentially earn higher levels of income. It also provides external

benefits to third parties which a self-interested and rational consumer will choose to ignore in the amount of education they choose to consume as it does not benefit them directly.

A self-interested doctor who is only interested in making money may choose to stop studying after a certain point. to open his own private practice once he graduates rather than pursuing advanced degrees (consuming further education) which may allow him to invent new medicine that would benefit society (the third party). From a society's perspective, Q_{opt} is the optimum education the consumer should consume as it takes into account both private and external benefits and where $MSC=MSB$. Therefore, there is under-consumption of the good and service and this is graphically shown by Q_m being greater than Q_{opt} . The shaded area is the deadweight loss as shown by the shaded area which shows the net benefit yet to be enjoyed ($MSB < MSC$) as a result of under-consumption.

The existence of positive externalities of consumption implies that the market is failing to allocate efficiently as consumers are consuming less merit goods than the level of what society wants them to consume at.

Essay 10 (Paper 1)

A government might adopt policies to respond to a market situation in which significant asymmetric information exists. Evaluate such policies and use real-world examples in your answers. (15 marks) (Nov 2022 HL)

Asymmetric information is defined as the situation where one party in a transaction has more information than the other, which can lead to market failure; more specifically referred to as adverse selection.

One of the ways which the government uses to overcome the problem of adverse selection is via the provision of unbiased, factual information of goods and products. Many businesses adopt branding and marketing techniques to persuade consumers that their goods and services are better than they actually are; hence causing consumers to purchase products that they may not have if they had the full picture. By providing unbiased, factual reviews of goods and services, the government can help consumers to make better and well-informed consumer choices. An example of this would be the product reviews conducted by the Hong Kong Consumer Council on products such as heaters and cooking ware where they are rated on their durability and quality, revealing surprising results that the most expensive options are often not the best overall products and vice versa. This is very effective because the Consumer Council is perceived to be an independent, unbiased authority and their findings and reports are widely cited and reported in the media. However, the scale of the reviews and the plethora of products in the market means that only a very small proportion of the products can be assessed. Nevertheless, the reviews have encouraged consumers to be more careful when purchasing products and be more mindful of the marketing tactics e.g. branding that is being employed by companies.

Another way which the government can overcome the problem of adverse selection is to impose regulations on producers to ensure that critical information about the goods and services is revealed. Many countries mandate food packaging to list out the ingredients and nutritional value of their foods hence allowing consumers to know exactly what they are consuming and less easily swayed by branding and packaging. In the US, the so-called “Used

Car Rule” requires all car dealers to have a window sticker, known as a “Buyers Guide” for second hand cars on sale; revealing informing potential buyers about the car’s warranty and its terms and conditions. Other regulations may include preventing cigarette companies from packaging the cigarette packs in an attractive manner and make it mandatory to have packaging that conveys the health impacts of smoking such as lung cancer and tooth decay. These regulations allow consumers to be more informed when making consumption choices. These regulations are effective from increasing information transparency as important, salient information has to be published. However, the extent to which it addresses the asymmetry depends on the extent to which an average consumer can understand the information, which is often technical at times e.g. nutrients and their chemical composition. Furthermore, most companies would elect to disclose the least amount of information available and continue to hide important information as it may affect their business. For example, “natural flavouring” in food can include preservatives which businesses do not need to disclose.

Licenses and legal consequences are put in place by the government to address information asymmetry. This often takes place in professional services such as medical and legal services where its practitioners e.g. doctors and lawyers have to be certified before they can practice, hence screening out those who are not qualified to practice. Due to the specialized nature of their occupation, there is a significant gap between their knowledge compared to their client. In order to prevent these practitioners from exploiting their clients e.g. undergoing an unnecessarily expensive medical procedure to earn more profit, guidelines are put into place by their respective professional bodies on how they are to interact with their clients and what information must be disclosed before certain actions are taken. In Hong Kong for example, the risks of the medical procedure must be explained to patients before they undergo the operation. Whilst this works in theory, the fact that there are so many different scenarios and nuances in these areas mean that it is very difficult to gauge whether exploitation has taken place. A trusting and risk averse patient may elect to have more medical treatment even if they are not needed.

From the above, the provision of more information through official reviews, regulations and licensure allow information to be more evenly distributed allowing economic agents to make more informed economic choices and overcoming the problem of adverse selection. However, the fact that many of them are regulation based implies that potential loopholes exist for profit seeking companies to exploit consumers whilst operating legally.

Mr. Lai's notes: the key to this question is to be able to explain and evaluate how the solution rectifies the asymmetry. For example, it is not good enough to say that licenses allow lawyers and doctors to be qualified; the subsequent screening and legally required to disclose information is required. Be explicit and clear in your explanation.

Essay 11 (Paper 1)

A government might respond to the existence of asymmetric information in a market.

Explain two ways the government could do so. (10 marks) (Official IB Specimen Paper HL)

Asymmetric information is defined as the situation where one party in a transaction has more information than the other, which can lead to market failure; more specifically referred to as adverse selection.

The government can overcome the problem of adverse selection via the provision of unbiased, factual information of goods and products. Many businesses adopt branding and marketing techniques to persuade consumers that their goods and services are better than they actually are; hence causing consumers to purchase products that they may not have if they had the full picture. By providing unbiased, factual reviews of goods and services, the government can help consumers to make better and well-informed consumer choices. An example of this would be the product reviews conducted by the Hong Kong consumer council on products such as heaters and cooking ware where they are rated on their durability and quality, revealing surprising results that the most expensive options are often not the best overall products and vice versa.

Another way which the government can overcome the problem of adverse selection is to impose regulations on producers to ensure that critical information about the goods and services is revealed. Many countries mandate food packaging to list out the ingredients and nutritional value of their foods hence allowing consumers to know exactly what they are consuming and less easily swayed by branding and packaging. In the US, the so-called “Used Car Rule” requires all car dealers to have a window sticker, known as a “Buyers Guide” for second hand cars on sale; revealing informing potential buyers about the car’s warranty and its terms and conditions. Other regulations may include preventing cigarette companies from packaging the cigarette packs in an attractive manner and make it mandatory to have packaging that conveys the health impacts of smoking such as lung cancer and tooth decay. These regulations allow consumers to be more informed when making consumption choices.

From the above, the provision of more information through official reviews and regulations allow information to be more evenly distributed allowing economic agents to make more informed economic choices and overcoming the problem of adverse selection.

Mr. Lai's notes: 1) Some students talk about making it legally mandatory for consumers to disclose certain information when buying insurance. This may not necessarily be a valid point as insurance companies already do that already. Consumers who are not willing to disclose such information would simply not be able to buy it. 2) No diagram is needed for this question.

Essay 12 (Paper 1)

There are different approaches to managing common access resources. Evaluate them and support your answers with real-world examples. (15 marks) (IB Specimen Paper HL for May 2022 first assessment)

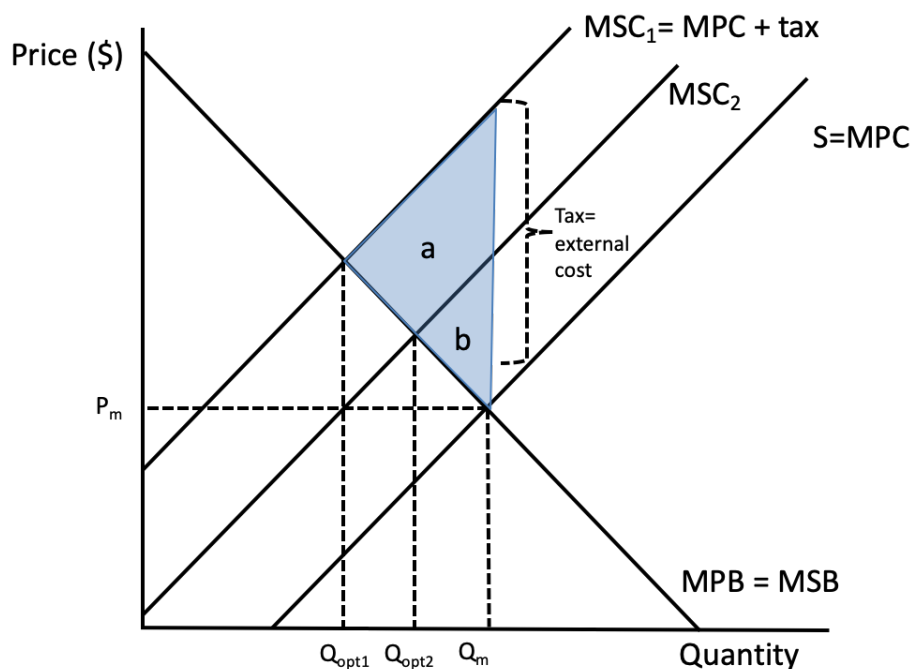
Common access resources (CAR) are resources where no party has property rights over the use of it, and hence are available for anybody to use without having to pay. They are rivalrous but non-excludable in nature. An example would be a fishing pond which no one owns and is accessible to all.

CAR such as lakes, forests and wetlands are huge in size and it is impossible for the government to ring fence them and avoid the public from using/enjoying them. The government has no intention either, given that it understands the benefits such resources can bring to the public through leisure and enjoyment. One of the ways which the government can manage CAR is to impose regulations on how those resources are used. An example of this are country parks in Hong Kong which are openly accessible to the public but the Hong Kong Country Park Ordinance and other related regulations prevent people from undertaking prohibited activities such as growing crops and building private property on the land. Furthermore, there are 22 special areas which include the Hong Kong Wetland Park created mainly for the purpose of nature conservation which are subject to even stricter regulations. However, the effectiveness of such regulations would depend on the extent to which the common access resources are monitored and policed. With the country parks spanning over 44,000 hectares, seamless monitoring would be impossible nor practical.

Many governments try to instill a sense of responsibility amongst people's actions by charging them a nominal amount for the use of the resource. Since they are paying to consume the resource, they would be more careful before using it. An example would be how fishing in New South Wales, Australia requires a monthly license fee of AUD 14. This could function as a mental nudge for users to think carefully with their decision to fish. The revenue from the licensing could be used to fund the maintenance of these CAR and allow them to be more sustainable in the long run. However, the issue with fishing licenses is that it is very difficult

to monitor whether its users are abiding to the confines of appropriate action. For example, there are often regulations related to the minimum size of a fish that can be caught to ensure the sustainability of the ecosystem, but making sure that everyone is doing it is near impossible. Therefore, the use of regulations to manage CAR is often complemented with education for the public about the importance of conservation of the environment from a very young age such that they are encouraged/conditioned to be acting in a caring manner, hence removing the need for close monitoring.

Imposing carbon taxes (a per unit tax on the carbon emissions of fossil fuels) on factories and industrial complexes are another way to manage clean air resources. Different possible fuels emit different quantities of carbon and the carbon tax takes this into account by taxing the amount on the basis of how much carbon the fuel emits. The greater the carbon emitted, the higher the tax paid.



A carbon tax is effective as there is an incentive for the firms to switch to more carbon efficient fuel since fossil fuels are taxed according to the amount of carbon emitted. In the diagram above, it is assumed that the marginal social benefit (MSB) is equal to the marginal private benefit (MPB). An externality exists because the marginal private cost (MPC) is greater than the marginal social cost (MSC) curve as seen by the MPC curve lying to the right

of the MSC curve. The social optimum point is Q_{opt1} but the market quantity is at Q_m meaning that there is an overproduction of $Q_m - Q_{opt1}$. With a carbon tax, since the fuel is more environmentally friendly, the optimum quantity that can be produced increases. This is shown by a downward shift in MSC_1 to MSC_2 and the optimum quantity increases to Q_{opt2} , hence leading to a smaller welfare loss (area b vs a+b). The welfare loss might further decrease should the MPC shift left due to the rising costs of production. An example of this is Canada where there is a nationwide tax on oil, coal and gas that charges \$38 Canadian dollars on every ton of carbon dioxide emitted. It must be noted that carbon taxes are only effective to the extent that it is the main offending pollutant. Fossil fuels also emit other chemicals such as methane and nitrogen which can be damaging to the environment and a tax which fails to acknowledge these other pollutants may render less effective than a tax on output. Furthermore, taxes on industries increases their costs and reduces their competitiveness. It is for this reason why steel and chemicals are exempted from Canada's carbon tax which may limit the effectiveness of the tax in the long run.

Regulations, charging for usage, public education and carbon taxes are four different ways which CAR can be managed. As with all solutions, each of them has their own drawbacks, especially when CAR is often very large in scale. Hence, solutions which rely on self-discipline and engaging in proper behaviour such as education may be more effective in the long run.

Mr. Lai's notes: 1) It is easy to forget that clean air is a common access resource (and only think about lakes, forests and ponds. 2) Other possible approaches include tradable permits and international agreements.

Essay 13 (Paper 1)

Explain the differences between decreasing returns to scale and the law of diminishing returns. (10) (May 2013 TZ2 HL)

The law of diminishing returns states that as more unit of a variable input such as labour is added to the production process whilst all other inputs are kept constant (short-run), the marginal product will increase at first but will eventually come to a point where it will decrease. On the other hand, decreasing returns to scale the state when the increase in input results in the less than proportionate increase in output. This is a long-run concept.

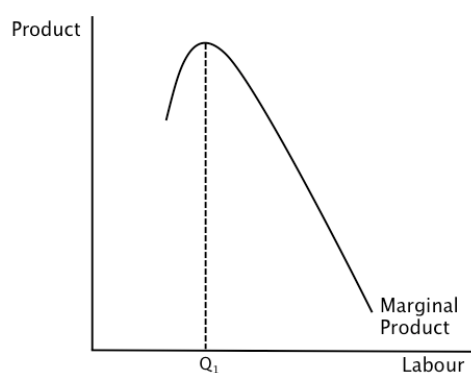


Diagram 1

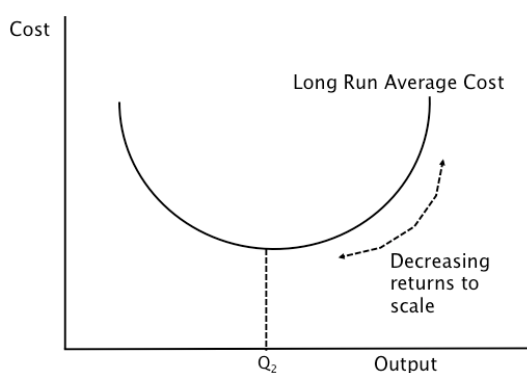


Diagram 2

Consider a farm that grows corn. When labourers are employed, the marginal product as defined as the output attributed to the extra unit of input employed e.g. labour would increase because the workers can share the work and make use of more effective production methods. The marginal product will keep on increasing until it reaches a stage where it will eventually decrease as could be seen in the diagram above when the number of labourers exceeds Q_1 . The reason is because other factors such as the size of the land or the number of large machineries is fixed in the short run and the increasing number of labour will “overload” the use of these fixed factors. For example, the farm may become overcrowded and workers may get in the way of one another or there are not enough tractors for workers to use. The marginal product will continue decreasing unless the scale of the farm would increase in the long run.

Decreasing returns to scale is a long run concept which takes place due to the diseconomies of scale that sets in when the scale of the companies grows beyond a certain point. Diseconomies of scale refer to problems such as inefficient communication and the cumbersome bureaucracy would set in when the company becomes too big. This concept is usually represented by the long run average cost starting to increase as could be seen when the company produces more than Q_2 in diagram 2 above. Referring to the previous example, when the scale of the farm begins to get too big, the owner may have trouble getting his messages across to the workers efficiently or strategic changes to crop-growing may be difficult due to the bureaucracy involved.

The law of diminishing returns is a short run concept that assumes at least one input factor is fixed and marginal product decreases at a certain point due to problems such as overcrowding. On the other hand, decreasing returns to scale is a long run concept where total product increases at a decreasing rate even if all inputs are flexible due to economies of scale setting in.

Essay 14 (Paper 1)

Perfect competition and monopolistic competition are different. Distinguish between them. (10 Marks) (May 2022 HL)

Perfect competition (PC) and monopolistic competition (MC) are placed on the same end of the market structure spectrum defined by low levels of market power and high degrees of competition.

PC is a theoretical extremity defined by a large number of buyers and sellers, perfect information, no barriers of entry and exit and undifferentiated goods and services. Firms have no market power and are price takers. MC shares the first three assumptions of PC but differs noticeably that the goods and services provided are differentiated; thereby implying that firms have some market power. This important distinction has profound implications on 1) the types of efficiency achieved in the long run 2) the form of competition firms engage in for both market structures.

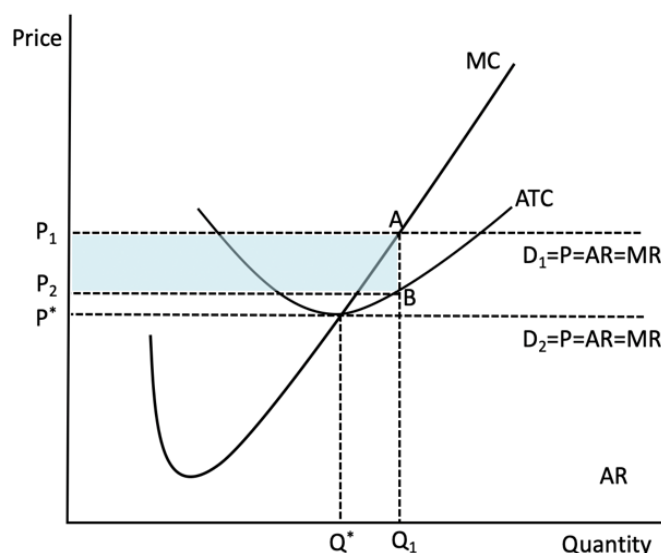


Diagram 1

Allocative and productive efficiency is achieved in PC market structure in the long run whereas neither is achieved in a MC market structure. In diagram 1 above, abnormal profits of P_1ABP_2 (shaded area) enjoyed by the PC firm in the short run by pricing the product at P_1 is short lived as it will be competed away by aspiring entrants who will be able to do so due to the

assumption that no barriers exist. Characterised by a perfectly elastic demand curve D_1 that is horizontal and reflects the absence of market power, the increase in supply will bring the price down to P^* (through a decrease in the demand curve to D_2) where economic profit becomes zero and firms only make normal profit which is just enough profit for them to justify staying in the industry. Allocative and productive efficiency is achieved at P^*Q^* where average costs (AC), marginal costs (MC), average revenue (AR) and marginal revenue (MR) are equal to one another. Price (P) is equal to MC allowing allocative efficiency to be achieved, as well as productive efficiency as firms are producing at the lowest point of the AC curve as Q^* .

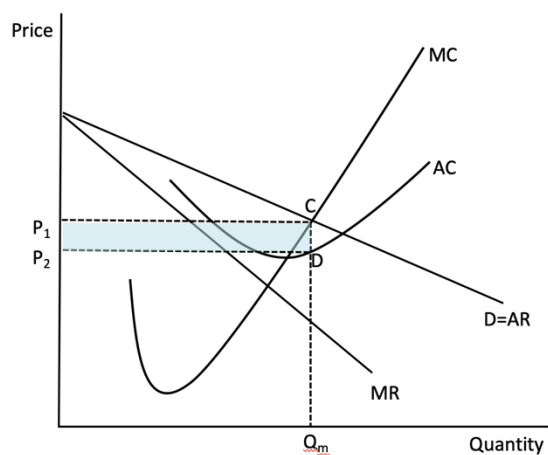


Diagram 2

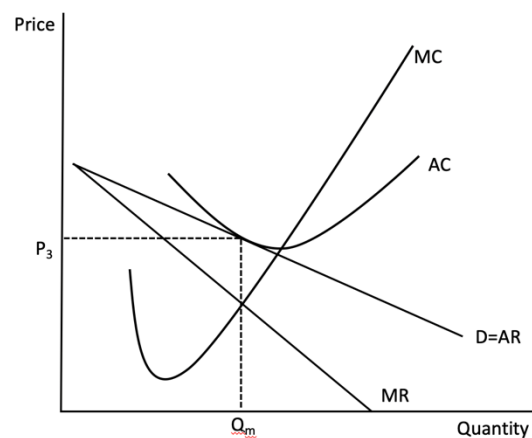


Diagram 3

Contrast this with a MC structure which depicts a slightly downward sloping demand curve which reflects that the goods and services are differentiated and firms have some market power or price setting ability. In the short run, the firm in diagram 2 is making abnormal profits of P_1CDP_2 (shaded area) but just like the PC market structure, aspiring entrants who are attracted to the abnormal profits will enter the market (and will be able to under the assumption of the absence of market barriers) and increase the level of industry supply. This will lead to a decrease in price from P_1 to P_3 (in diagram 3) where the demand curve lies tangential to the AC curve. No economic profit is made either in the long term but an important distinction to PC is that neither allocative nor productive efficiency is achieved as price does not equal to MC and the quantity (Q_m) is not produced at the bottom of the AC curve.

Another implication is the nature of competition PC and MC engage in. As goods and services in the PC market structure are undifferentiated, firms can only engage in price competition making them “price takers”. On the other hand, goods and services in MC market structure are slightly differentiated allowing MC firms to be price setters. Knowing that competing on price only competes away the economic profit being earned will encourage firms to be more willing to engage in non-price competition such as product differentiation and marketing branding.

PC and MC can graphically be distinguished by the horizontal and downward sloping demand curve respectively. This reflects the price taking and price setting nature of the two market structures respectively which leads to distinction in the allocative and productive efficiencies generated and forms of competition firms in both industries engage in.

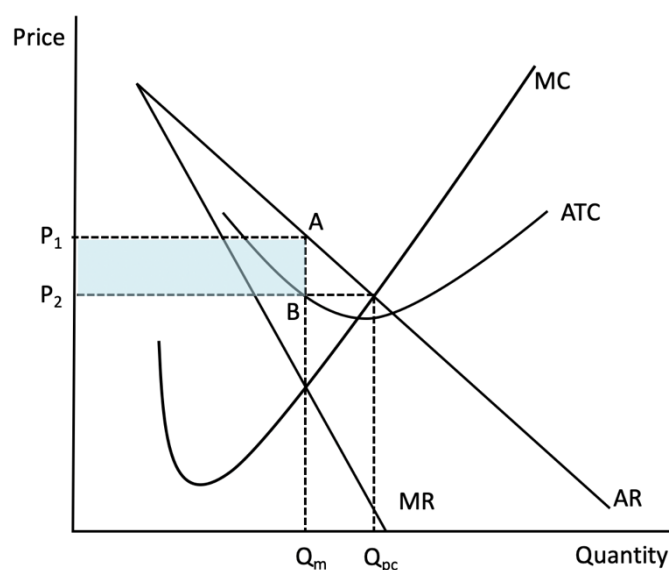
Mr Lai's Notes: 1) Monopolistic Competition IS NOT the same as a Monopoly. The number of students who do not know the difference is worrying. 2) Practice drawing the long run equilibrium of a monopolistic market structure. It is more challenging than it looks.

Essay 15 (Paper 1)

Large firms have significant market power. Discuss the impact of this and use real-world examples in your answers. (May 2022 HL)

Large firms exist in the monopoly (only one) and the oligopolistic market structure where there are a small number of large firms. Both structures are characterised with imperfect information, high degrees of barriers and exist, heterogeneous goods and services and have price setting abilities. Market power can be defined as the ability to set prices and also earn abnormal profits through manipulating supply and other business tactics.

Through significant market power, large firms in both market structures are able to exercise price setting abilities which means that neither allocative and productive efficiency is achieved.



This is illustrated through the monopoly diagram above where the quantity produced is at Q_1 and the price is at P_1 . As the price is not set equal to marginal cost (MC), allocative efficiency is not achieved and neither is productive efficiency as it is not producing at the minimum of the average cost curve. This creates a welfare loss of area ACD meaning that more can be produced at a lower price (P_2) and quantity (Q_{pc}) but is not done so due to the monopoly's significant market power. An example of this is Apple which behaves like a monopoly in the high-end mobile phone market, who wields significant market power through its product

differentiation and carefully crafted branding strategy. The profit margin of the iPhone in 2022 is around 24% which is achieved through setting high prices (more than USD 1500 for the flagship version) and low costs through its position as a dominant buyer (monopsony power) of raw materials and electronic parts which grants it significant powers. They are not pressured to price phones at a lower point as demand is price inelastic due to the strong brand loyalty and allows it to generate substantial abnormal profits, amounting to nearly USD 100 billion in 2022. The inconvenience of detaching from the IOS ecosystem is a natural barrier of entry for aspiring firms meaning that apple consumers continue to be “abused” in paying high prices to enjoy the service being offered.

Note that this is also the case in a collusive oligopoly, particularly in the case of a cartel such as OPEC which formally engages in price fixing in the global oil market. The member country could sell it at a lower price but choose to sell it at a higher price without the fear of being undercut due to the trust in the cartel system. Consumers are negatively affected as they have to pay high prices whilst these countries enjoy earning substantial abnormal profits.

The situation is not all dire for consumers buying products in industries with significant power. In order to maintain their market dominating position, firms are incentivised to reinvest in research and development to improve the quality of their products. Netflix is a leader in streaming and is known to have spent USD 17 billion annually on acquiring and developing new content to keep and grow its subscriber base. Doing so also allows them to benefit from dynamic efficiency which is the lowering of total average costs (AC curve shifts down) when new knowhows and production methods improves productive efficiency as a whole

Other large firms take a very long-term approach in growing their market share to global scale and instead adopt the growth in market share as their main business aim rather than profit maximisation. An example of this is Amazon who has kept the prices of the cloud services in Amazon Web services to very low levels in order to gain market share. With ambitions to dominate cloud services globally, consumers can enjoy low prices for significant periods of time. The obvious downside to this is once Amazon feels that they have gained enough market share, consumers would be left at their mercy when prices are increased.

Furthermore, industries which are natural monopolies in nature can benefit from economies of scale if they are allowed to serve the entire market by itself and bring down the cost of production through diluting the massive upfront fixed costs. An example would be China Light and Power (CLP) which provides electricity to the entire Kowloon and New Territories to offset the high fixed costs from building the power grid and electrical cables. However, this would mean that consumer choices are limited. The assumption of prices being lower would also depend on how closely the government scrutinizes the operations of the firm and the trust that cost efficiencies are passed on to end consumers. This is often difficult to gauge and the conflicting objectives of offering low prices to consumers and profit maximization for firms leads some to argue that the threat of competition through low barriers of entry and exit to be the best way that prices are minimized.

From the above, it can be seen that large firms having significant power have the impact of setting higher prices and producing less than they would in a competitive market. Consumers are negatively affected in most cases although firms may be incentivised to act in a competitive manner by researching in research and development and offering lower priced goods and services to maintain and/or grow their market position.

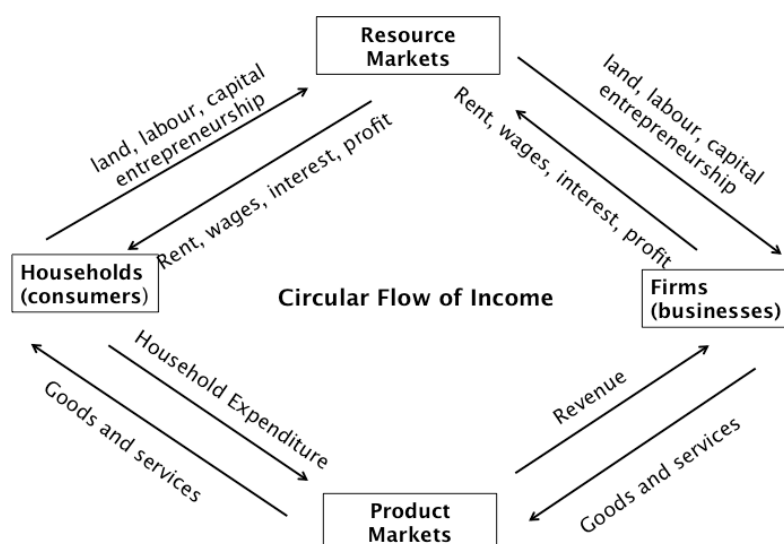
Mr Lai's Notes: A challenging question that requires a thorough understanding of the monopoly and oligopoly market structure. Note that market structures is part of the market failure unit and so the ways in which large firms abuse their market power needs to be discussed.

MACROECONOMICS

Essay 16 (Paper 1)

The income, output and expenditure methods are used to measure real gross domestic product (GDP). Explain how this works. (10) (May 2014 TZ2 SL)

Real GDP is defined as the market value of all final goods and services produced in a country over a period of time, usually a year and takes into account the effects of inflation. The three methods can be used interchangeably to calculate real GDP within an economy.



The diagram above is the circular flow of income and it clearly shows that the three methods derive the same GDP value regardless of the economy being open or closed. The reason is because whatever is produced (output approach) will be bought through the product markets (expenditure approach) in one way or the other using income earned (income approach) through the resource markets from different factors of production.

The expenditure approach measures the total amount of money used to purchase final goods and services in a country (usually within a year). Final goods and services (defined as goods and services available for final use) are only included to avoid the issue of double counting as the inclusion of the value intermediate goods and services would already be embedded in the

value of final goods and services. An example is an iPhone (final good) and its parts e.g. screen, casing (intermediate good). The expenditure approach has five components. Consumption (C) is the sum of all household spending on domestically produced goods and services. Investment (I) is the spending by firms on capital goods e.g. equipment, and construction which usually enhances the productivity of the economy in the future. Government spending (G) includes any spending of the government on an economy such as education and healthcare which may sometimes be referred as “public investment”. Net Exports (NX) is the difference between exports (X) and imports (M) which are goods and services sold to and bought from other countries respectively. The relationship can be expressed in the following equation $GDP = C + I + G + (X - M)$. Import is a negative value since money is flowing out of the economy and is treated as “leakage” in the circular flow of income.

The income approach sums up all the returns from the factors of production within a country over a time period (usually a year). Wages are the returns from labour, rent from land, interest from capital and profits from entrepreneurship. The sum of all factor incomes generates the value of national income. Note that national income is not the same as GDP and adjustments involving depreciation, indirect taxes as well as the origin of income earned (domestically or abroad) would be needed to derive the GDP.

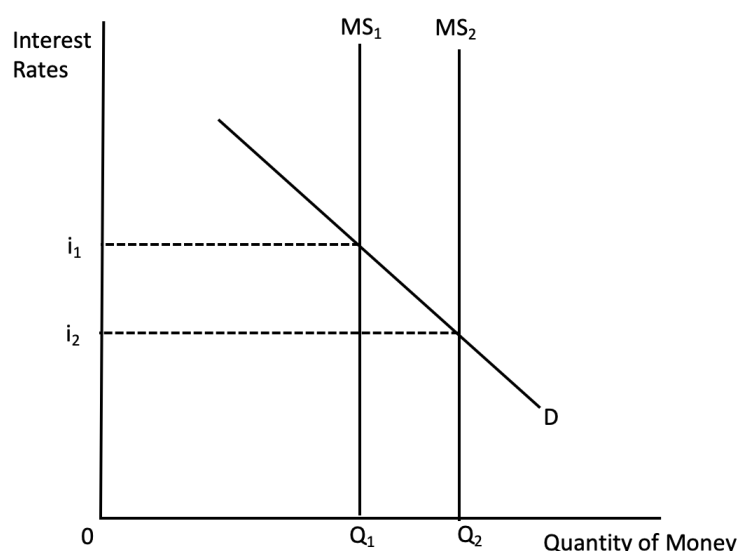
The output approach measures the value of final goods and services produced in the economy over a particular period of time; “final” to avoid the problem of double counting as outlined above. In most countries, industry associations publish data on individual industries e.g. agriculture, manufacturing, transport, banking, which would be collated and published by the country’s census or statistics department. An example of this would be the *Hong Kong Banking Report* that is published by KPMG annually. This approach allows for the performance of each industry to be examined and comparisons to be made across different sectors.

The three methods outlined are different ways of measuring the GDP or more generally, the economic activity of an economy. Note that all values are rebased to the base year to account for the impact of inflation and to come up with a “real GDP” figure.

Essay 17 (Paper 1)

Explain two tools that is available to a central bank to conduct expansionary monetary policy. (10 marks) (IB Specimen Paper HL for May 2022 first assessment)

Expansionary monetary policies are policies undertaken by the government to achieve economic growth by stimulating aggregate demand via the lowering of interest rates.



The central bank can lower interest rates through open market operations where it buys bonds in the financial markets and increases the level of money supply. In the diagram above, buying bonds leads to an increase in money supply at each and every price level as shown illustrated by a rightward shift in the supply curve from MS_1 to MS_2 . Assuming that the demand for money is constant, the increase in supply will lead to a fall in the equilibrium interest rates. Lower interest rates implies lower cost of borrowing hence making it cheaper for consumers and firms to conduct consumption and investment activities respectively. Examples include the increasing the purchase of cars as the cost of servicing car loans are lower and the purchase of capital machinery for production purposes. Since consumption and investment are components of aggregate demand (AD), the increase in both elements would lead to a rise in AD. Furthermore, a lower interest rate will lead to an outflow of capital as returns are lower leading to more of the domestic currency being supplied. Assuming a flexible exchange rate regime, the domestic currency will depreciate leading to an increase in net exports as the value of exports and imports will increase and decrease respectively. Net exports will increase leading to a rise in AD.

The central bank can conduct monetary expansionary policy by lowering the reserve requirement ratio (RRR) of commercial banks. RRR refers to the proportion of deposits which banks must keep as liquid cash within its institution. Lowering the RRR means that more money can be lent out to consumers and investors, hence increasing the level of money supply. Referring to the same diagram above, this leads to a rightward shift in the supply curve from MS_1 to MS_2 , hence leading to a fall in the level of interest rates. As explained above, lowering interest rates stimulates consumption, investment and net exports, hence leading to an increase in AD.

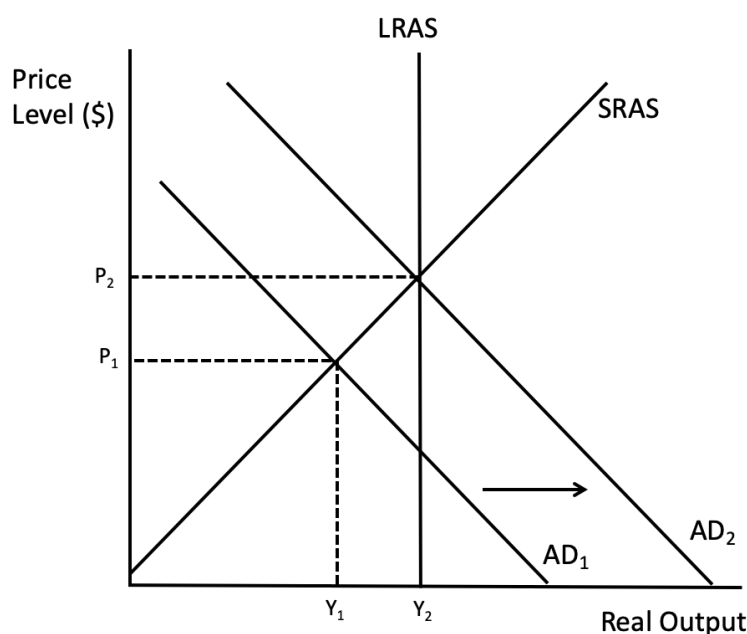
From the above, it can be seen that the central bank can conduct expansionary monetary policy through open market operations and the lowering of the reserve requirement ratio of commercial banks.

Mr. Lai's notes: students should be able to write step by step how expansionary monetary policy is conducted by adopting the different tools.

Essay 18 (Paper 1)

Monetary policy is used to achieve low unemployment. Evaluate its effectiveness and use real-world examples in your answer. (15 marks) (IB Specimen Paper HL for May 2022 first assessment)

Unemployment refers to the people within the working age population who are willing and able to find work but cannot find any. Low unemployment is often achieved via expansionary monetary policy which refers to the measures carried out by central banks to influence economic activity through the changes of money supply. Expansionary monetary policy is an effective way of overcoming cyclical unemployment which is caused by the lack of demand.



When the economy is in an economic recession, the central bank may lower interest rates to stimulate aggregate demand. It does so through open market operations where it increases the money supply by buying bonds from the financial markets and releasing money to the economy. As the supply of money has increased, the cost of money i.e. interest rates will decrease making it more affordable for consumers and firms to borrow money for the consumption and investment activities. Aggregate demand will increase hence leading to higher revenue for businesses, hence allowing them to increase their demand for labour. In the diagram above, a fall in interest rates leads to a rightward shift in the AD curve from AD_1

to AD_2 . Output increases from Y_1 to Y_2 implying that more workers will be employed to cater for the higher levels of production.

An example of this is the COVID-19 pandemic where the unemployment rate increased from 3.67% to 8.05% in 2020 in the US due to the social distancing measures and closure of many businesses. Throughout this entire period, the US kept interest rates at the 0-25 basis points range to allow consumers and businesses to have easy access to credit. This proved to be effective in reducing unemployment as the rate of unemployment fell back down to 5.46% in 2021. Expansionary monetary policy to reduce unemployment is favoured by policy makers because it does not require government expenditure and is easy to implement. However, conducting expansionary monetary objectives to reduce unemployment may conflict with the macroeconomic objective of reducing the rate of inflation. The Federal Reserve was forced to raise interest rates in 2022 when inflation rates reached 5%. Note that the Federal Reserve was probably aware that inflation was a threat as early as the beginning of 2021 when there was a sudden uptick in inflation to 2% but was forced to wait longer for unemployment to fall to a lower level.

Furthermore, a lower interest rate will lead to an outflow of capital as returns are lower leading to more of the domestic currency being supplied. Assuming a flexible exchange rate regime, the domestic currency will depreciate leading to an increase in net exports as the value of exports and imports will increase and decrease respectively. However, whether net exports will increase will depend on whether the Marshall-Lerner condition is satisfied. Due to COVID-19, the demand for Japanese cars globally (particularly from China) has become price inelastic, meaning that the weaker yen has actually led to a decrease in net exports. Japanese exports to China fell 17% on a year on year basis. A related point is that the success of monetary policy relies on consumer and business confidence. A weak outlook will be unlikely to encourage investors and consumers to invest and consume more, hence delaying the employment of workers to meet this extra demand. In Hong Kong, interest rates have stayed low during COVID-19 from 2020 to mid 2022 (0.5% to 2.5%) but unemployment have increased to over 7% at its peak (2021) as businesses have no visibility on when social distancing measures are will be finished and dare not over invest on human capital.

Furthermore, there is no assurance that more human beings will be employed even if business confidence has recovered given the rapid technological progress in automation and artificial intelligence i.e. firms may choose to use robots over human beings.

Monetary policy is relatively ineffective in overcoming structural unemployment, which is defined as employment that is caused by a mismatch in the skills offered and demanded in the region. Generating more aggregate demand through lowering interest rates would not allow unsuitable workers to be hired. An example of this is the UK where there are large demands for workers in aviation and manufacturing but unemployment hovers around 5% in 2020. Retraining programs are much more well suited to address structural unemployment. It is also equally ineffective in addressing frictional and seasonal unemployment because these have to do with information issues and spending patterns that interest rates are not able to address. This implies that monetary policy can only reduce unemployment to the natural rate of unemployment, *ceteris paribus*.

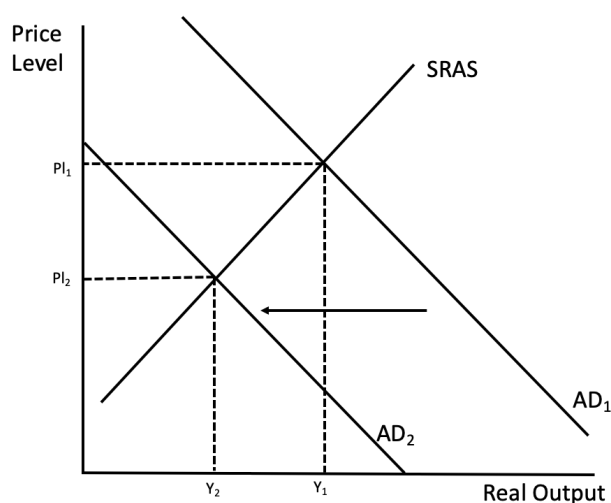
Monetary policy is effective in achieving low unemployment but is largely limited to addressing cyclical unemployment and requires consumer and business confidence to be sufficiently high for aggregate demand to increase.

Mr. Lai's notes: many students fail to get higher marks as they are not able to distinguish monetary policy's ability to address different types of unemployment. Part a of this question is also about monetary policy and it is not necessarily to repeat content that has been covered previously. For the purpose of learning, I have covered aspects of monetary policy again.

Essay 19 (Paper 1)

Monetary policy is used to achieve low inflation. Evaluate its effectiveness and use real-world examples in your answer. (15 marks) (IB Specimen Paper HL for May 2022 first assessment)

Monetary policy is defined as a set of actions undertaken by the central bank to achieve certain macroeconomic economic objectives (low inflation in this case) via changing the level of money supply. Inflation is defined as the sustained increase in general price levels where lower rates of inflation is referred to as disinflation.



Contractionary monetary policy is the most common policy tool undertaken by central banks to lower the rates of inflation. By reducing the level of money supply, interest rates will increase and hence lead to an increase in the cost of borrowing. Rising interest rates will make borrowing money for consumers and businesses to finance consumption and investments (where both are components of aggregate demand (AD)) respectively more expensive and will lead to a fall in AD. In the diagram above, a fall in AD is illustrated by a leftward shift in the AD from AD_1 to AD_2 , hence leading to a fall in income from Y_1 to Y_2 and general price levels from Pl_1 to Pl_2 , hence achieving a lower level of inflation. Monetary policy is such an effective tool in tackling inflation as rising interest rates impact economic decision making on many fronts. In addition to consumption and government spending, rising interest rates allow imports to be cheaper through a stronger domestic currency via attracting capital inflation and hence lowering the level of imported inflation. It may also reduce government

spending for countries which rely on the issue of government debts to finance its budget. A good example of this is the US which has been experiencing increasing rates of inflation since May 2020. When it reached 8.6% in March 2022, the Federal Reserve started to increase interest rates from the 0-25 bps range to the 25bps-50bps range and continued to increase it on a bimonthly basis ever since (4.50% to 4.75% as of Jan 2023). Inflation peaked at 9.1% in July 2022 and started to decrease down to 6.3% in January 2023. The trends show that although inflation was persistent in the beginning, interest rates were generally very effective in addressing inflation rate issues.

Monetary policy is also effective in tackling inflation because it can be quickly implemented as it is usually conducted by the Central Bank which is independent and not subject to political pressure. It also does not require spending any of the government's budget (unlike fiscal policy) which significant impacts can be brought about by merely adjusting money supply, and thereby by the rate of interest.

However, the fact that it is so powerful and effective also means that it impacts on other macroeconomic objectives when used and hence cannot be conducted without other considerations taking place. US inflation started to increase in May 2020 but it was not until March 2022 before the US treasury started to raise interest rates. The reason is because the US was experiencing low levels of growth since 2020 due to the impact of COVID-19 and the central bank had to keep interest rates low to ensure sufficient liquidity was available to financial markets to keep the economy afloat. Even though inflation was increasing due to rising energy prices, the federal reserves had to wait until the economy was on more steady grounds before it was willing to raise interest rate rates to fight inflation.

Note that contractionary monetary policy is only effective in addressing demand pull inflation but not so for cost push inflation. Due to the Russian-Ukraine conflict, energy prices throughout the world have increased with Europe increasing more than 32% in the first quarter of 2022. This was the same situation for rising material prices during COVID-19 as logistic issues created supply chain issues around the world. If contractionary monetary policy

was implemented, rising interest rates would only further increase the cost of production and worsen the rate of inflation.

Contractionary monetary policy is generally effective in achieving low inflation but conducting it may conflict with other macroeconomic objectives. Hence, it must be used carefully and only conduct it for addressing demand-pull inflation and not cost-push inflation as it will only worsen the situation.

Mr. Lai's notes: being able to distinguish between the impact on demand-pull and cost-push inflation is important for scoring a higher mark.

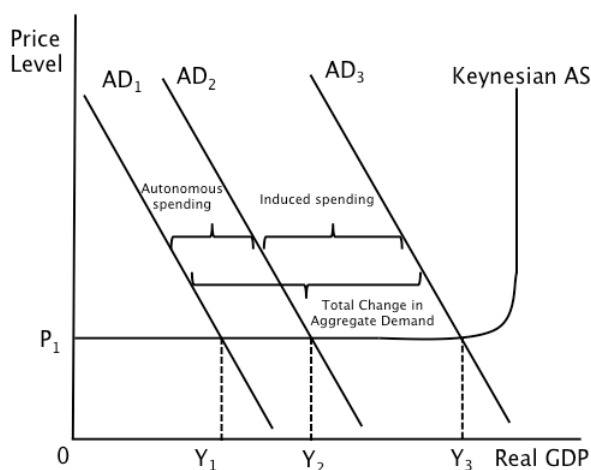
Essay 20 (Paper 1)

Explain the possible impact of a rise in government spending on economic growth by using the concept of the Keynesian multiplier. (10) (May 2015 TZ2 HL)

The Keynesian multiplier refers to the ripple effect created when increase in spending by one of the components of aggregate demand (AD) would lead to subsequent increases in aggregate demand, though each successive increases would be smaller than the previous due to leakages in the economy. Should the change in aggregate demand be positive, it would lead to economic growth as defined by the increase in real GDP.

Aggregate demand is defined as the total demand for final goods and services in an economy at a given time. It is the summation of consumption (C), Investments (I), Government Spending (G), Exports (X) minus Imports (M) and commonly expressed by the following equation.

$$AD = C + G + I + (X - M)$$



The government may try to stimulate economic growth by increasing government spending in the economy which may take the form of infrastructure spending such as roads and railway and spending on education and medical care. An example of this is China where USD 112 billion will be spent on high-speed rail in 2018 in an effort to increase fixed investments and stimulate long-term economic growth. As shown in diagram A, this is the autonomous

spending or spending which is brought about by an external stimulus (the government) and will increase the economic output from Y_1 to Y_2 in the absence of a multiplier. However, the multiplier is likely to be positive since the USD 112 billion in real GDP will produce a further chain of spending otherwise known as induced spending. For example, the USD 112 billion autonomous spending will be spent on businesses to pay for materials, capital equipment, labour who the owners of such factors of production will use it for their own consumption spending. As consumption increases, this will lead to further consumption and will continue to increase the GDP beyond the USD 112 billion initially spent on the economy.

The size of the induced spending ($Y_3 - Y_2$) depends on the marginal propensity to consume (MPC) which refers to the proportion of the income spent on consumption. This is regarded as an injection in the circular flow of income as money is being put in to the system. On the other hand, the proportion which is not spent is saved which is why savings are regarded as leakages and each successive round of consumption will become smaller. Assuming that the MPC stays constant in each round, the multiplier (the multiple which the autonomous spending is multiplied by) is

$$\text{Multiplier} = 1/(1 - \text{MPC})$$

China is known for its high savings rate and so assuming an MPC of 0.5, the multiplier would be $1/(1 - 0.5) = 2$ and the increase in economic growth by the USD 115 billion investment would be USD 230 billion.

As a determinant of AD, an increase in government spending would directly lead to economic growth (assuming that supply is not perfectly inelastic) and its initial impact is magnified by the multiplier.

Essay 21 (Paper 1)

Explain two possible causes of deflation. (10 marks) (IB Specimen Paper SL for May 2022 first assessment)

Deflation is defined as the sustained decrease in general price levels.

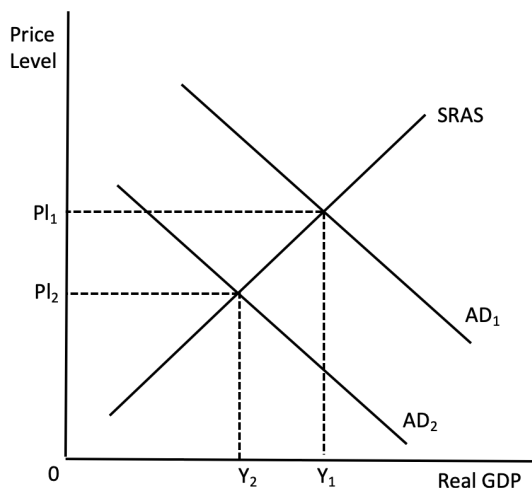


Diagram A

Deflation can be caused by a decrease in aggregate demand in the economy. In diagram A, the economy is currently at P_1 and Y_1 . A decrease in aggregate demand is graphically shown by a leftward shift in the demand curve where national output has fallen down to Y_2 and general price levels have fallen to P_2 showing that deflation has taken place. A decrease in aggregate demand can be caused by a number of factors related to its components of consumption, investments, government spending and net exports. For example, consumption can fall due to a recession and people's income have dropped, investments can fall due to the fall in business confidence and government spending can fall due to a worsening budget deficit.

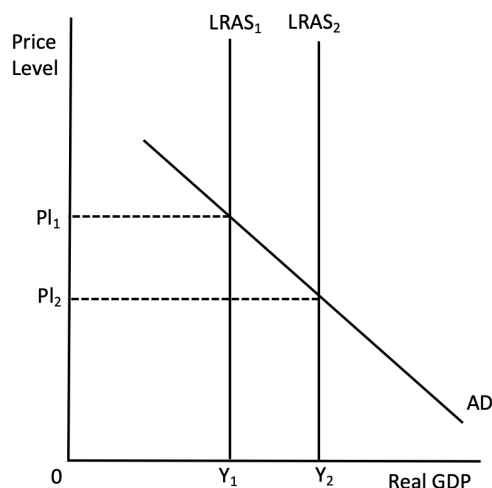


Diagram B

Deflation can also be caused by an increase in aggregate supply in the economy. In diagram B, the economy is currently at Pl_1 and Y_1 . An increase in aggregate supply is graphically shown by a rightward shift in the supply curve where national output has increased to Pl_2 and the general price levels have fallen down to Y_2 , hence conveying that deflation has taken place. An increase in aggregate supply is usually caused by an improvement in the factors of the production in the economy. For example, breakthroughs in technology and new production methods improves the capital component and allows the economy to produce more at each and every price level. Improvement in the level of education provision for the public also has the same impact.

Deflation caused by falling aggregate demand is commonly perceived to be negative as it leads to falling output. On the other hand, deflation caused by an increase aggregate supply is commonly seen to be positive as lower prices are caused by higher levels of productivity.

Essay 22 (Paper 1)

A high rate of inflation may negatively affect both a country's export competitiveness and the level of capital investment by firms. Explain why this is the case. (10) (May 2017 TZ1 HL)

Inflation is defined as the sustained increase in general price levels. Inflation would lead to an increase in the price of exports which will make it more expensive for foreign countries to purchase its goods and services. As a result, less will be imported from the country and hence negatively affecting its export competitiveness.

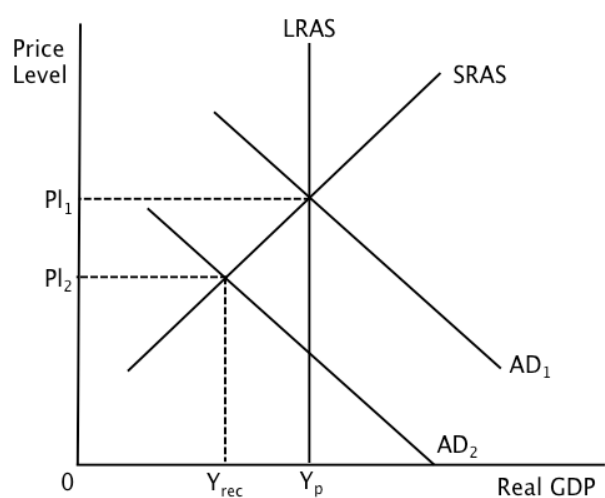


Diagram 1

In diagram 1, the economy is operating at its potential Y_p . Following an increase in inflation, exports become more expensive and the demand for its export decreases. All else being equal, net exports and hence aggregate demand decreases as a result as shown by a leftward shift from AD_1 to AD_2 and output falls to Y_{rec} . Note that a fall in net exports will actually lead to a fall in price levels from PI_1 to PI_2 ceteris paribus. An example of this is Singapore in 2017 which saw net exports decrease because of the rise in inflation. According to purchasing power parity (PPP), inflation should lead to the depreciation of its domestic currency as the demand for the country's currency will fall following the decrease in the demand for its exports. This will make exports cheaper and imports more expensive until net exports resume to its original levels. When PPP holds, inflation will not negatively affect the country's export competitiveness ceteris paribus. But given that exchange rates may also be affected by a lot

of other factors such as the flexibility of the exchange rate regime, the restoration of export competitiveness is not guaranteed.

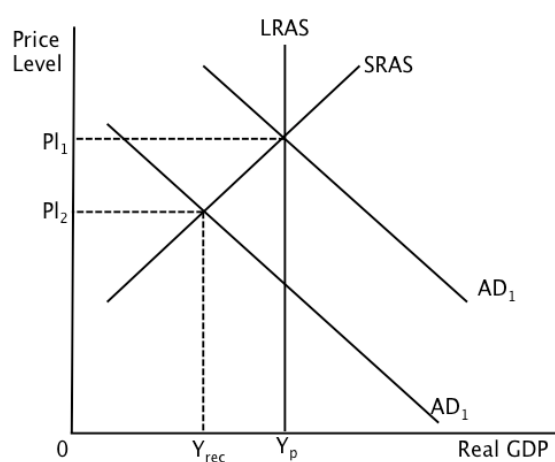
Inflation negatively affects the level of capital investments by firms primarily because of the uncertainty it creates. With high inflation, firms are less willing to invest heavily because it will be more difficult to forecast costs and revenues as this will be affected by future prices of the input for their products. However, it is interesting to note that some economists have argued that some inflation is good for capital investments. Spooked by very stable prices i.e. inflation close to zero, the head of the Japanese Bank of Japan Haruhiko Kuroda argued that since firms cannot expect nominal revenues to increase in the coming years via inflation, firms would seek self preservation by cutting costs and reducing capital expenditure.

Inflation is generally regarded as having a negative impact on export competitiveness and capital investment due to the changes in prices and the uncertainty it creates.

Essay 23 (Paper 1)

Distinguish between the following types of unemployment: structural and demand-deficient unemployment. (10) (November 2015 TZ0 HL)

Structural unemployment results from a change in the structure of the economy (local or national) which leads to a decrease in the demand for workers with certain skill sets. Together with seasonal and frictional unemployment, it is one of the types of unemployment that occurs when the economy has reached the rate of natural unemployment. On the other hand, demand-deficient unemployment occurs during the economic downturn of the business cycle due to low or declining aggregate demand. It is therefore also known as cyclical unemployment.



Consider the diagram above, the economy was originally producing at Y_p where the level of demand deficient unemployment is zero. According to the monetarist perspective, this is regarded as the long term equilibrium as the aggregate demand curve (AD_1) intersects the short run aggregate supply curve (SRAS) at the point where long run aggregate supply (LRAS) is reached. However, due to falling aggregate demand which may be a result of falling consumer confidence due to a dire outlook of the economy as was the case in 2009 in the UK when the world financial crisis broke out, the economy will produce at less than its potential output. Graphically, this is shown by a leftward shift in the aggregate demand curve to AD_2 where a lower output Y_{rec} is produced. As less output is produced, less workers will be

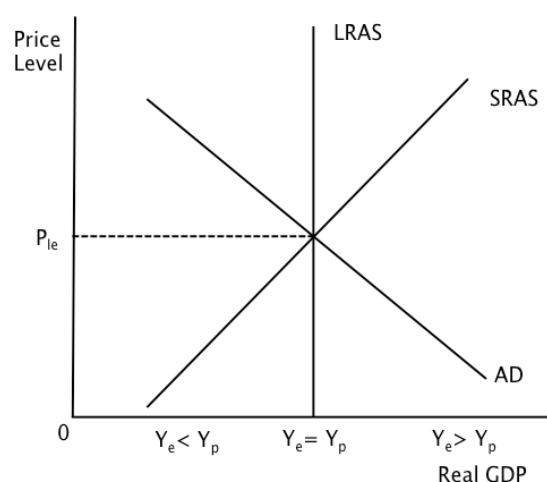
employed leading to a rise in unemployment. The “lack” of demand (demand-deficient) is responsible for such unemployment.

On the other hand, structural employment is not associated with the business cycle or the levels of aggregate demand. During the 1980s, many coal mines in the UK were shut down due to competition from abroad and the UK economy was transitioning to a full-fledged service industry. As a result, many regions such as Nottinghamshire and Yorkshire which had a sizable coal industry experienced a substantial rise in structural unemployment which had nothing to do with the changes in the business cycle. According to the monetarist view, structural unemployment is a form of labour market rigidity which takes places even when the economy is at the long run equilibrium (Y_p in the diagram above). Hence, it is part of the “natural rate of unemployment” as it arises naturally from an imperfect labour market. Given that these imperfections and rigidities are embedded into the economy, monetarists consider the natural rate of unemployment (where output is at Y_p) as full employment.

Demand deficient unemployment and structural employment are fundamentally different concepts as the former is caused by falling aggregate demand as a result of the downturns in the business cycle whereas the latter is caused by the changes in the structure of the economy (local or national). Structural unemployment occurs independent of the state of the business cycle and is one of the forms of unemployment that constitutes the natural rate of unemployment.

Essay 24 (Paper 1)***Explain what the meaning of natural rate of unemployment is. (10) (May 2015 TZ1 HL)***

The natural rate of unemployment is the sum of seasonal, structural and frictional unemployment. In the monetarist framework as shown in the diagram below, the equilibrium output in the short run is determined by the forces of aggregate supply and aggregate demand which could be inflationary (where the real output (Y_e) is greater than the potential output (Y_p), deflationary (where Y_e is less than the Y_p) or at the potential GDP where $Y_e = Y_p$.



According to the monetarist approach, any unemployment that occurs is “natural” when real output equals potential GDP because changes in wages (assumed to be flexible) would restore output to the long run equilibrium. This is because when $Y_e = Y_p$, factor markets such as labour are also in equilibrium meaning no unemployment should not exist as the wages would be set at a level where the market is cleared and no worker would be willing and able to work but unable to find any job. Should there be any unemployment, it must be due to labour rigidities which are the underlying causes to frictional, seasonal and structural unemployment and are independent of fluctuations in the business cycle.

Frictional employment takes place when workers are between jobs and are transitioning because they have been fired, made redundant or simply to find a better opportunity. It tends to be short term and is independent of the economic cycle the economy is in as is inevitable given the changing dynamics of industries. The frictional unemployment can be made longer or shorter with information.

Seasonal unemployment occurs when the demand for certain goods and services are seasonal and hence the demand for labor changes likewise. For example, farm workers would be made redundant during the wintertime but would be rehired during the harvest time in the summer. This is the same for lifeguards who would be out of work during the winter months when many pools will be closed due to the cold weather.

Structural unemployment takes place as a result of the change in the structure of the economy which results in the change in the demand for particular types of skills, industries and hence related jobs and workers. A good example of this is the rapid demise of the textile and other secondary related industries during the 1980s in Hong Kong when many factories moved to mainland China following the country's open-door policy which offered cheap labour and land for operations. Such change can also be brought about by improvements in technology where certain jobs are replaced by robotics such as the workers who used to work in factory lines.

The natural rate of unemployment is the unemployment which occurs when employment is at its full capacity given the constraints imposed by frictional, frictional and structural unemployment.

Essay 25 (Paper 1)

There exists potential trade-off between unemployment and inflation. Discuss them and use real-world examples in your answer. (15 marks) (Nov 2022 HL)

Inflation is defined as the sustained increase in price levels and unemployment is the state in which workers who are able and willing to work cannot find gain employment. According to the Phillips curve, there is a negative relationship between inflation and unemployment where the favourable condition of one e.g. low unemployment would be achieved at the cost of the other e.g. high inflation. The reasoning can be explained by diagram A, the AS-AD model and B the Philips curve below.

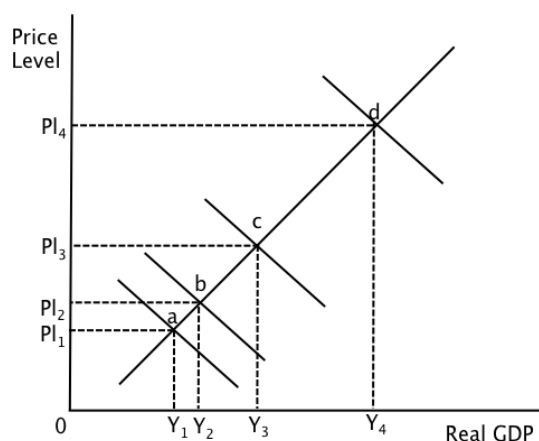


Diagram 1

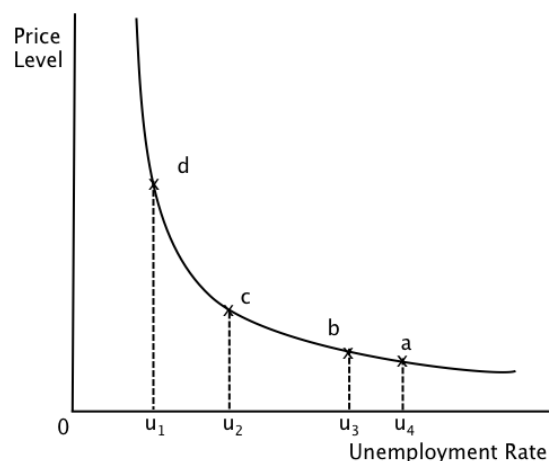


Diagram 2

Assuming an upward sloping short run aggregate supply (SRAS) curve, different levels of aggregate demand (AD) will yield different levels of income and output. At AD_1 the price level is at Pl_1 and the real GDP at Y_1 . Following an increase in aggregate demand due to some form of autonomous spending such as increase in consumption, the AD curve will shift outwards to AD_2 , hence achieving a higher price level Pl_2 and output Y_2 . Note that this corresponds to the Phillips curve as a higher level of output refers to a lower level of unemployment as more labour is engaged for the production of goods and services. The output at Y_1 and Y_2 in diagram 1 corresponds to the unemployment levels u_4 and u_3 in diagram 2. The relationship remains the same when the level of aggregate demand increases for AD_3 to AD_5 . At AD_5 , a higher level of output corresponds to a low level of unemployment but a higher level of inflation Pl_5 is achieved at the same time. This negative relationship between inflation and unemployment can be seen between June 2020 to November 2022 where the US economy restarted after it

was forced to slow down due to COVID-19 and its corresponding social distancing measures leading to the closure or downsizing of many businesses. Unemployment began to fall (from 11% to 4% during that period) as businesses started to rehire workers who were previously made redundant and inflation was on the rise (from 0.8% to 9%) due to the generous federal pandemic measures; a form of government spending that drives up aggregate demand. Interestingly, such measures made rehiring difficult for many labour-intensive industries such as restaurants as it lowered the opportunity cost of not working and many businesses had to raise salaries substantially to hire workers, hence contributing to the rising inflation.

Note that the increase in AD which increases price level is the case of demand-pull inflation where general price levels in the economy are caused by increases in aggregate demand. An example of this is the increase in inflation from 0.12% to 2.65% in 2015 due to stronger investment and consumer spending following a more confident investment outlook.

However, the negative relationship between inflation and unemployment depends on a stable SRAS which may not always be the case as costs of production are prone to change due to supply shocks or technological improvements. Consider diagram 3 and diagram 4 below.

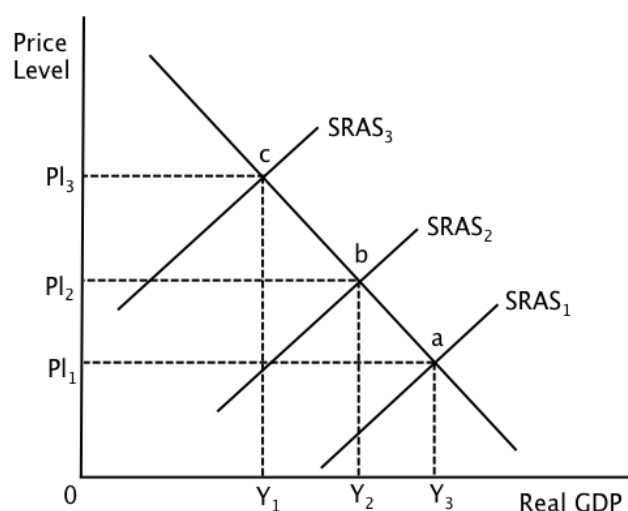


Diagram 3

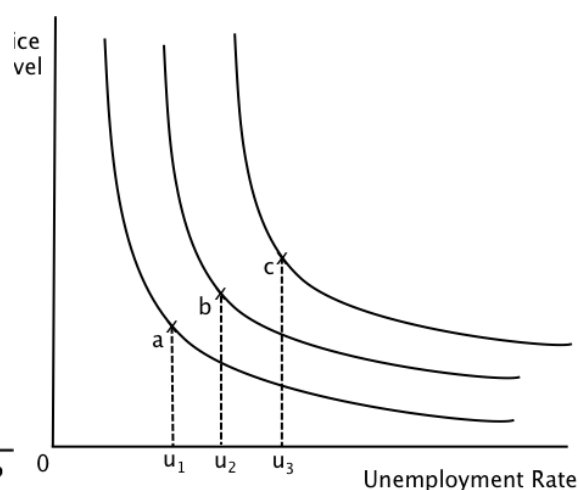


Diagram 4

At the $SRAS_1$, the price level is at Pl_1 and the output is at Y_3 . Following an increase in the cost of production, less is being supplied at each and every price level and the SRAS curve shifts to

SRAS₂ where the price level is at a higher Pl_2 and the output is at a lower Y_2 . A lower output corresponds to higher levels of unemployment u_2 as less labour is needed to be employed. Given that one Phillips curve corresponds to one SRAS curve, a leftward shift in the SRAS curve to SRAS₂ will lead to a rightward shift in the Phillips curve. This was the case during the 1973 oil crisis when the prices of oil increased by 40%. Since oil is used in a wide variety of products from petroleum to plastic, the rise in oil prices greatly increased the cost of production and led to a decrease in output and subsequently an increase in unemployment. There was known as stagflation and there was no trade-off between inflation and unemployment.

Even in the absence of supply shocks, the SRAS proves to be unstable as well in the long run according to the classical framework.

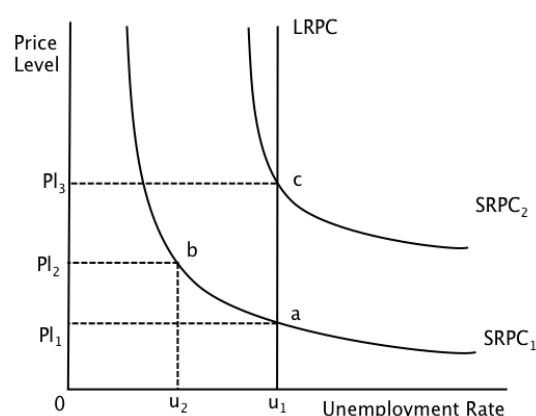


Diagram 5

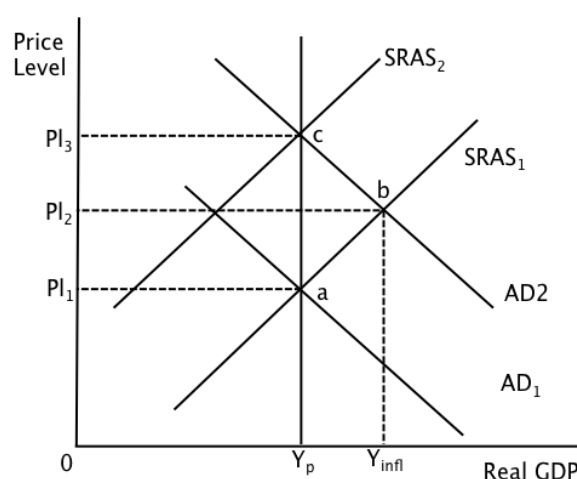


Diagram 6

Suppose that the aggregate demand increases from AD_1 to AD_2 , the level of real output increases from Y_p to Y_{infl} in diagram 6 and the level of unemployment drops from u_1 to u_2 . However, as the price level has increased from Pl_1 to Pl_2 but wages have stayed constant, workers will negotiate for higher wages, hence increasing the cost of production and reducing the SRAS from $SRAS_1$ to $SRAS_2$. The price level increases to Pl_3 and the natural rate of output reverts to Y_p . From the perspective of the Phillips curve, operating on a higher $SRAS_2$ shifts the Phillips outwards to short run Phillips Curve ($SRPC_2$) and the unemployment returns to u_1 . Hence, it can be seen that there is also no trade-off between inflation and unemployment in the long run when wages are sufficiently flexible. Indeed, there are instances when wage changes may be rigid, such as a recession where real output has decreased but wages are

held constant due to labour market rigidities such as trade unions and existing contractual terms. An example of this is when the US was in recession in 2008 due to the global financial crisis but wages stayed relatively constant.

The Phillips curve demonstrated that a trade-off exists between inflation and unemployment. However, this depends on a stable SRAS curve which may not necessarily be the case in the presence of supply shocks and flexible wages in the long run.

Essay 26 (Paper 1)

A sustainable level of government (national) debt is an important macroeconomic objective. Explain why this is the case. (10 marks) (Nov 2022 HL)

Government debt refers to the debt issued by the government to fund the government budget and its fiscal policy.

A sustainable level of government debt is important because the debt servicing costs can run up and become unsustainable in the long run. Debt servicing cost refers to the interest that is charged on the principal and the effect of compound interest means that the debt amount can grow quickly. Should the debt grow to unsustainable levels and it can no longer be serviced e.g. the interest payment can no longer be paid, then the government would be forced to default on its debt and the repercussions would have a crippling effect on the economy. This is especially the case when the debt to GDP ratio is overly high meaning that its national income can no longer be able to service the debt. This could include the austerity measures that are put in place for the government to repay the money and the outflow of capital that follows an economic crisis.

A country's credit rating is determined by its ability to repay and service the loan. The higher the rating, the more trustworthy the country is, which increases the chance for the government to receive a loan at a more favourable interest rate. It is important for government debt to be kept at a sustainable level or otherwise credit rating agencies such as Standard and Poor will lower the credit rating of the country and affect its ability to procure loans at favourable interest rates. In other words, other countries may only be willing to buy its bonds if the rate of interest is higher. A direct consequence of this is that this might affect the level of government spending going forward and hence have a negative impact on the essential services of an economy.

If the level of debt (denominated in the local currency) is not kept under control, inflation could take place as the government resorts to printing money to pay off the debt. Inflation takes place because whilst the real value of goods and services in the economy stays constant,

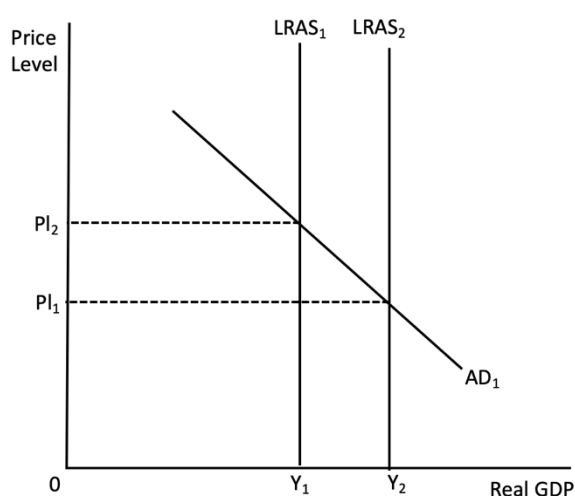
the supply of money has increased, hence inflating the monetary value of goods and services as they are bid up, and reducing the value of money. Hyperinflation could take place in the worst case scenario.

The rising debt service costs, lowering of credit rating and inflation are important reasons why maintaining a sustainable level of government debt is an important macroeconomic economic objective as the failure to do so can lead to dire economic consequences.

Essay 27 (Paper 1)

Supply-side policies might encourage greater domestic competition and improve the international competitiveness of a country. Explain how this works. (10 marks) (May 2022 SL+ HL)

Supply side policies are policies which aim to expand the productivity and growth potential of an economy. Supply side policies can be further categorised into market-based policies which use the market mechanism to allocate resources and interventionist policies where the government directly invests and provides support to enhance productivity in a sector.



Privatisation and anti-monopoly legislation are two market-based supply side policies which can lead to greater domestic competition. Privatisation is defined as the conversion of state-owned enterprises to privately run companies through the sale of its shares to the private sector either through an initial public offering or direct sale to companies. Since private firms often regard profit maximisation as a business objective (rather than simply the provision of goods and services), they would engage in competition with other firms with regards to price, service quality and product differentiation, hence increasing the level of domestic competition. An example of this is the privatisation of all of the state-owned shopping malls in Hong Kong in 2005 through a Real Estate Investment Trust (REIT) finance structure called LINK REIT where the quality of shopping malls improved substantially in subsequent years and rivalled those in quality and product offerings operated by private companies such as Swire and Sun Hung Kai. The level of domestic competition is further enhanced by anti-monopoly

legislation which prevents companies from becoming monopolies through raising the requirements of merging or acquiring another company and lowering the barriers of entry and exit. All in all, this makes the domestic economy more productive as reflected in a rightward shift in the Long Run Average Supply (LRAS) curve from $LRAS_1$ to $LRAS_2$ in the diagram above.

The provision of subsidies and support to a specific sector is a form of interventionist intervention that could raise the international competitiveness of a country. An example of this is the Innovation and Technology Support Programme operated by Hong Kong's Innovation and Technology Commission and the two quasi-government operated science parks (Cyberport and Hong Kong Science & Technology Park) which aims to incubate technological start-ups and enhance the productivity and scale of local technology companies. These programmes provide financial capital to companies for hiring and purchase of capital equipment as well as the provision of non-financial support such as office space, professional services and training. These initiatives de-risks the operation of companies, increases their probability of survival and enhances their productivity and scale in the long run. Examples of companies that have grown to be sizable Hong Kong companies include WeLab (Fintech company), and Lalamove (a logistics company) which has grown beyond Hong Kong and expanded to the rest of Asia. With more and more companies becoming sizable, independent companies, the overall competitiveness of the city/country will be enhanced and rival that of their international counterparts. As can be seen in Diagram 1, this is also shown by a rightwards shift in the LRAS from $LRAS_1$ to $LRAS_2$ which denotes an increase in the productive capacity of Hong Kong.

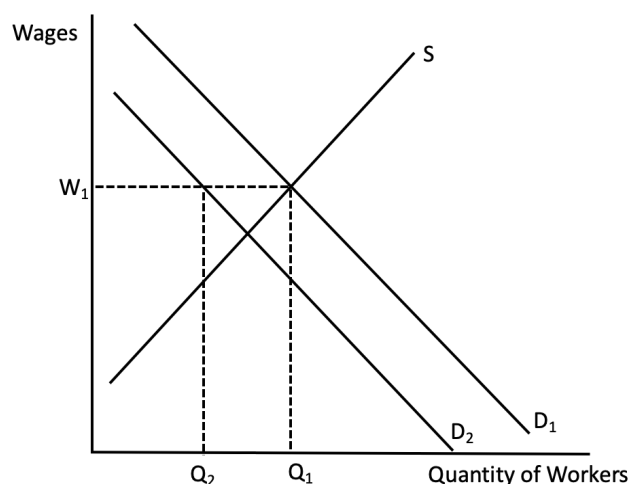
From the above, it can be seen that market based and interventionist supply side policies can encourage greater domestic competition and improve the international competitiveness of a country.

Essay 28 (Paper 1)

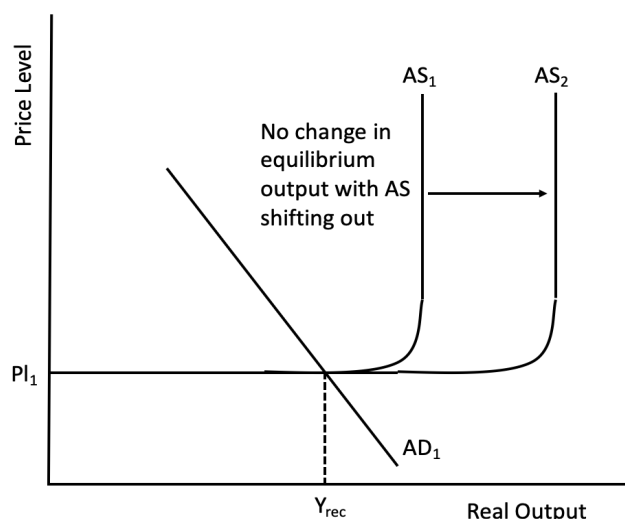
“The use of interventionist supply-side policies is the most effective way of reducing a country’s rate of unemployment.” Evaluate this view and use real-world examples in your answer. (15 marks) (May 2022 SL+ HL)

Interventionist supply side policies are defined as purposeful and deliberate government initiatives to enhance the productivity and growth potential of a country. Unemployment is defined as the number of people who are actively looking for work but are not able to.

Whether interventionist supply-side policies are the most effective way of reducing a country’s rate of unemployment would ultimately depend on the root cause of the unemployment. Unemployment often exists due to structural reasons (aka structural unemployment); the mismatch of the skills offered by workers and the labour demands of society and interventionist supply side policies in the form of education and training is very effective in overcoming such unemployment. By retraining workers to be equipped with the skills demanded by the economy, structural unemployment will be reduced. In Hong Kong, following the movement of manufacturing industries to Mainland China after the open-door policy was introduced in the early 1980s, many people who used to work in these industries were unemployed as they did not have the skills to work in a serviced based economy. Through government training schemes, such as the Education Retraining Bureau (ERB) in recent years, these workers have been retrained to be equipped with the skills to re-enter the workplace. A particularly successful transition was the successful case of retraining older women to become qualified domestic workers to meet the increasing demand for non-domesticated helpers in Hong Kong, hence reducing structural unemployment. One of the caveats of a successful implementation is the government’s ability to provide adequate, useful training for aspiring workers. Furthermore, since retraining requires time, the unemployment rate will not be reduced immediately.



For a more immediate remedy to reducing unemployment, financial subsidies provided to companies can lessen the cost of human resources and allow the rate of unemployment to be reduced. In the diagram above, a fall in the demand for workers would like to unemployment level of $Q_1 - Q_2$ at wage w_1 . Providing subsidies could help maintain labour demand at close to D_1 . A rather extreme form of this can be seen in the 2022 Employment Support Scheme under the Anti-epidemic Fund that provided wage subsidies (maximum HKD 8000 per worker) to employers for the months May, June and July 2022 to retain their current employees or employ more staff when the business revives as soon as the epidemic situation permits. This has to be very effective as the level of unemployment was reduced from 5.4% in April 2022 to 4.3% with no noticeable rebound after the scheme was finished in July 2022. Though effective, this method takes a substantial toll on the government budget as the scheme is statewide and the Hong Kong government spent HKD 43 billion in those three months alone. Hence, the effect of reducing unemployment for countries with inadequate fiscal reserves might be very limited if not impossible to implement. Countries could finance via the sale of debt via bonds but this may simply worsen the economic state of the country over the long run.



Interventionist supply side policy is ineffective in overcoming unemployment that is cyclical in nature and results from low levels of aggregate demand. Interventionist supply side policy (or any form of unemployment as a matter of fact) would only result in the productivity of the country being enhanced. In the diagram above, an interventionist supply side policy will simply enhance the growth potential of the economy; graphically shown by a rightward shift in the aggregate supply curve from AS_1 to AS_2 . The equilibrium output still remains at Y_{rec} where there is a recession and cyclical unemployment exists. The only way that this can be resolved is an increase in aggregate demand through the use of expansionary fiscal or monetary policy.

In the above, it can be seen that Interventionist supply side policy is effective in overcoming unemployment that is structural in nature and not so for cyclical unemployment. Therefore, whether interventionist supply-side policies are the most effective way of reducing a country's rate of unemployment would ultimately depend on the root cause of the unemployment as well as the magnitude of the policy.

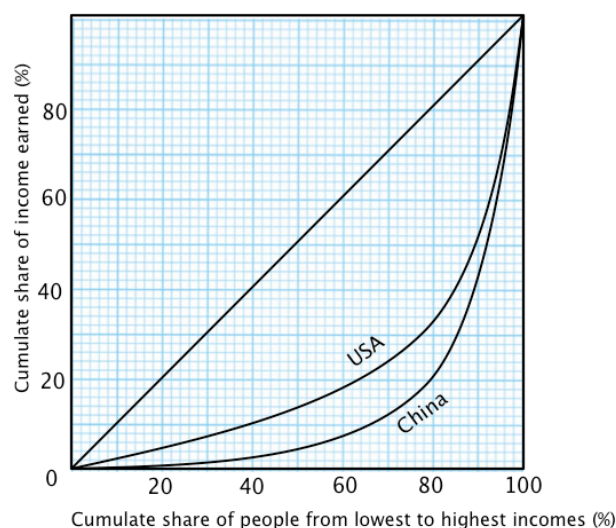
Essay 29 (Paper 1)

“The market system may not result in an equitable distribution of income.” Explain why this is the case. (10) (May 2013 TZ1 HL)

The market system allocates resources according to the forces of supply and demand with price acting as the means to ration, incentivize and to signal.

According to the circular flow of income, the amount of goods received by consumers in an economy depends on their level of income, which in turn depends on payments they receive by selling their factors of production (land, capital, labour and entrepreneurship). The amount of money they receive from selling the factors of production is contingent on the factor prices and the quantity of resources which they have. The income distribution problem that arises from this system is that the ownership of the factors of production can be highly unequal. For example, most people possess the labour skills which they can employ to make a return in the form of wages. However, some people are either more skillful than others or possess a skill set which are rewarded more richly in a market based economy e.g. doctor vs. cleaner. Those who are poor may not be able to buy even the most basic needs such as food, clothing and shelter. For those who do not have any skills, they would be unable to earn any wages which would mean they would not receive any goods and services unless they have other factors of production to sell, which will be unlikely given their circumstances.

Income inequality is further enhanced by the fact that the highest earning individuals are often further gifted with other factors of production such as land, capital and entrepreneurship. Given the wide array of opportunities to invest, the deployment of capital to money managers to directly on stocks and bonds have only made the rich richer and widened the income distribution gap.



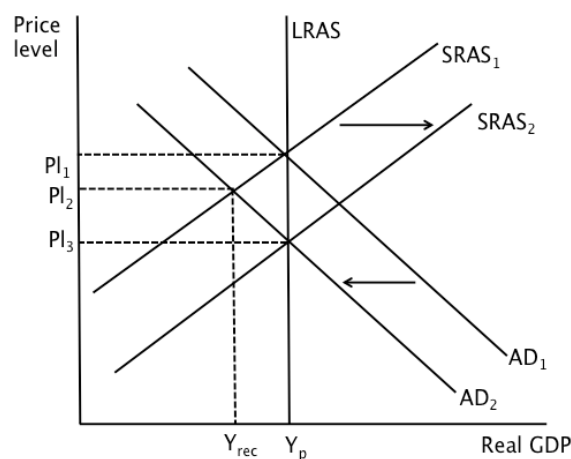
In the Lorenz curves above, the USA has a Lorenz curve which is closer to the 45 degree line than China meaning that it has a more equal distribution of income than China. The reason for this is because China has a great disparity between Coastal cities such as Shanghai and Shenzhen compared to the western regions of Chongqing. Apart from the greater trading activity which takes place along the coast, it was also because the coastal cities were designated as special economic zones and were given preferred treatment and much more investment resources as compared to the rest of China. Hence, people living there are far richer compared to those living in the inner regions. On the other hand, whilst income equality also takes place in the US, the geographical disparities are less pronounced as natural resources are more equally distributed and its longer history of peace allowed the government to redeploy resources to poorer regions and grow them.

The market only reflects the forces of demand and supply and there is no mechanism to address unequal distributions of income. Hence, a market determined distribution of income in an economy is likely to be very unequal as the allocation of the factors of production are unequal in the first place and people in their respective wealth positions become increasingly entrenched.

Essay 30

Explain why the economy will always return to the full employment level of output following a recession with the use of the monetarist/new classical model. (10) (November 2015 TZ0 HL)

In the monetarist/new classical framework, full employment of output is defined as when the economy's unemployment level is at the natural rate of unemployment where structural and frictional unemployment are also included. This framework proposes that following a recession; formally defined as a fall in GDP for 2 consecutive months but simply the economy is operating less than its potential output in this framework, the economy will be able to restore itself to full employment through the assumption of perfectly competitive markets and flexible wages.



Monetarist/new classical model of economy

Illustrated in the diagram above, the economy's equilibrium is currently at P_1Y_p where output is at full employment level. Due to a rise in interest rates, the cost of money increases and the level of investment falls, triggering a decrease in the aggregate demand as reflected from the shift from AD_1 to AD_2 . As a result, real GDP falls from Y_p to Y_{rec} and the price level from P_1 to P_2 . Note that as the economy is producing below its potential of Y_p to Y_{rec} , a recession is created through the recessionary gap of $Y_p - Y_{rec}$ created. Lower aggregate demand implies lower demand for the factors of production, including labour which is either underemployed or simply being made redundant.

Note that as the AD shifts to the left, it leads to a downward movement on the short run aggregate supply curve (SRAS) which assumes constant wages in the short run. Given lower prices of P_2 , firms find it difficult to sustain wages at the current level and would look to maintain profitability by lowering wages. Assuming flexible wages and the fact that workers are in a position of weakness (higher levels of unemployment relative to the natural rate), wages would decrease. The cost of production for the firm would therefore decrease, allowing them to produce more at each and every price level. Graphically, this is shown by a rightward shift in the SRAS curve from $SRAS_1$ to $SRAS_2$ and the long run equilibrium of Y_f where potential output is restored.

From the above, it is clear that the assumption of flexible wages drives the process which allows the economy to restore itself to full employment. This model fits best in countries where the labour market is flexible and there are few market rigidities such as minimum wages and trade unions which hinders the labour markets' ability to readjust itself. An example of this would be Hong Kong where minimum wages are relatively low and labour unions are far less powerful than their European counterparts.

THE GLOBAL ECONOMY

Essay 31 (Paper 1)

A currency depreciation might affect a country's current account balance. Explain how this is the case. (10 marks) (IB Specimen Paper HL for May 2022 first assessment)

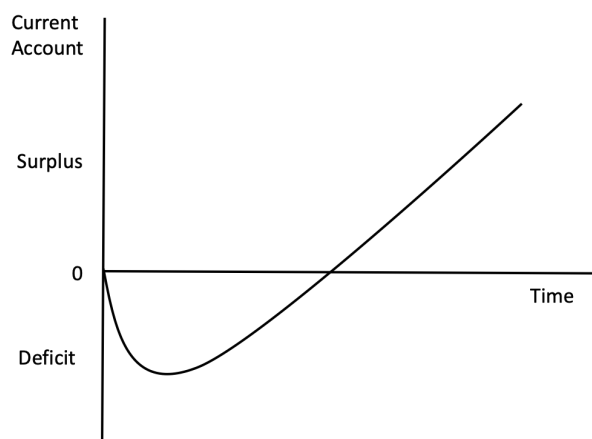
Depreciation refers to the fall in a country's exchange rate in a freely floating exchange regime. A country's current account balance refers to the balance of trade in goods and services, net income and net transfer. The balance of trade in goods and services is by far the biggest component of the current account and refers to the difference between the exports and imports of goods and services.

One of the potential positive impacts brought about a country's current account balance is an improving balance of trade i.e. net exports will increase. When the currency depreciates, the value i.e. purchasing power of domestic currency will decrease and the foreign currency to increase. Hence, it will make exports cheaper and imports more expensive; thereby increasing and decreasing the demand for exports and imports respectively. However note that the value of exports and imports is determined by the following equations:

Value of Exports = Price of Exports x Quantity of Exports

Value of Imports = Price of Imports x Quantity of Imports

Whether the increase in the quantity of exports and decrease in the quantity imports (caused by depreciation) will lead to a higher value of exports and lower value of imports respectively will depend on whether the Marshall-Lerner condition is satisfied. This condition says that a depreciation will only lead to an increase in net exports (Value of Exports – Value of Imports) if the sum of the price elasticity of demand (PED) for exports and imports add up to more than 1.



As can be seen in the diagram above, this may not take place in the short run as PED for exports and imports are low perhaps because contracts are in place and time is needed for decision makers to react. As a result, consumers and firms in both the domestic and foreign economies consume the same quantities of exports and imports, hence leading to a fall (rather than a rise) in the value of net exports as shown by the initial sloping curve. Once consumers and firms have had time to react to the changes in relative prices (and assuming that the Marshall-Lerner Condition is satisfied), net exports will increase as shown by the upward sloping curve in the long term. This is also known as the J-curve.

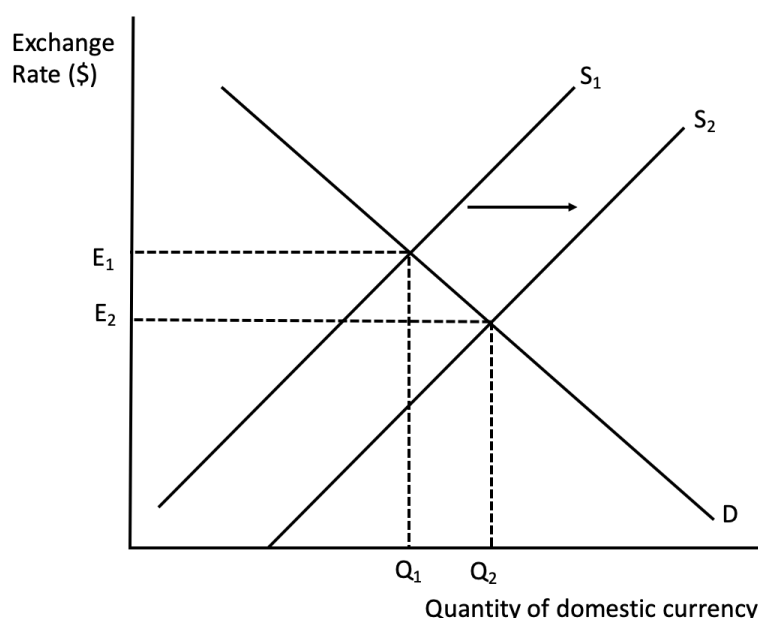
A currency's depreciation will improve a country's current account balance if the Marshall-Lerner Condition is satisfied but will deteriorate if it is not.

Mr Lai's notes: Strong students will be able to distinguish that the balance of trade is only a part of the current account and be able to explain the Marshall-Lerner condition clearly.

Essay 32 (Paper 1)

A persistent current account deficit may have possible implications. Discuss them and use real-world examples in your answer. (15 marks) (IB Specimen Paper HL for May 2022 first assessment)

A current account deficit is defined as the value of imports being greater than the value of exports of goods and services (assuming net income and transfers to be negligible). In other words, a persistent current account deficit means that the purchase of imports is greater than the sale of exports over a long period and the economy is spending more than it could earn. Balance of trade in goods and services is negative.



This is unsustainable unless the deficit is reversed or there is some way to finance the imbalance. If the country operates under a floating rate regime, an implication of this is that depreciation of the domestic currency may take place to reverse the trade imbalance. In a floating exchange rate system, the strong demand for foreign imports implies an increase in the strong demand for the foreign currency as transactions will be denominated in the foreign currency. The supply of the domestic currency will increase as it is being exchanged for the foreign currency, hence leading to depreciation. Graphically, this is shown by a rightward shift in the supply curve of the domestic currency from S_1 to S_2 , hence leading to a fall in the

exchange rate from E1 to E2. As shown in Essay 31 (part a of the question), the value of exports and imports may increase and decrease respectively assuming the Marshall-Lerner condition is satisfied. Given enough time, the trade balance will be reverted. Research from the European central bank in 2007 has shown that some form of depreciation has accompanied current account deficits in 71 cases. However, weakening exchange rates can lead to imported inflation especially for countries that rely heavily on oil and gas imports. This may raise the cost of production and lead to the rise of domestic inflation in the country. This is the case in Japan where it experienced the highest level of inflation in 43 years when inflation rates reached 4.3% due to the increase in the price of raw materials brought about by the weak yen, hence affecting the rate of economic growth.

Another implication of a persistent current account deficit is the inflow of financial capital to finance the deficit. Foreign ownership of domestic assets may increase as a result of higher FDI as well as an increase in debt issued by the government. The US has the largest financial account deficit in the world against China, the country with the largest financial surplus. The US is able to maintain this current account deficit with China as China is willing and able to buy US treasuries to such an extent that it has become its largest debt holder (amounting to USD 1 trillion of treasuries). China is willing to continually buy US treasuries because it has faith in the economic prowess of the US and that it will be able to finance the debt over the very long term. The same faith may not necessarily be extended to economically weak countries. In the most extreme cases, countries which have significant deficits implies that they may not be able to finance imports in the long run, putting them in a situation similar to a default and resulting capital flight where the value of the currency further plummets. An example of this is Turkey where its significant current account deficit (USD 5.9 billion in Dec 2022) and dire economic circumstances has led to an 80% fall in the value of the lira from 2021 to 2023. Note that the dire consequences of a persistent current account deficit only apply for significant deficits. For relatively small deficits, the government may be able to finance it through foreign direct investments and it could persist without significant effects in the long run.

Given the adverse effects of a persistent current account deficit, an implication may be the intervention of the government to address the situation through contractionary fiscal and monetary policy. This is also known as expenditure reducing policies where the increase in tax and interest rates will make imports relatively more expensive and thereby reducing the consumption of it. For cases that call for more extreme measures, imports for some goods are banned from entering the country. Pakistan has had a serious balance of payments problem that has worsened in 2022 and only has USD 3.2 billion in its reserves as of February 2023, an amount that can only cover 3 weeks of imports. A ban has been put in place where the only imports allowed are essential food items and medicine to stem the outflow of US dollars. Domestic consumers are forced to “switch” their expenditure to domestically produced goods for other products. However, this measure is a double edge sword as many industries rely on imports for supplies and have resulted in them closing down, not to mention the threat of retaliation with such an extreme measure.

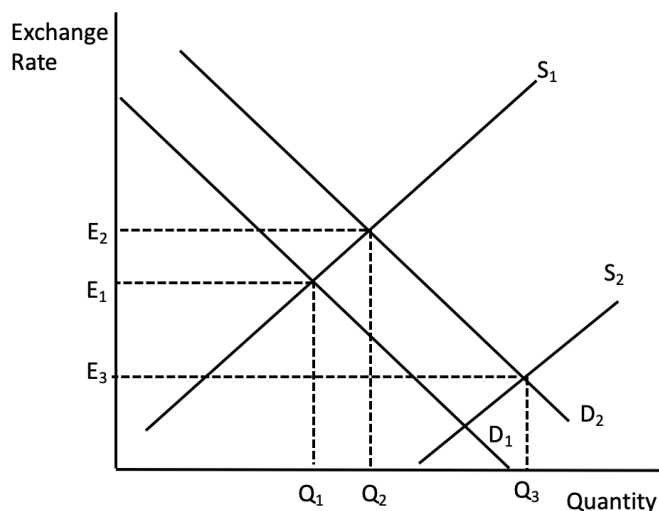
A persistent current account deficit can lead to depreciation of the currency and a fall in international credit rating as other countries lose faith in the country to finance the deficit. Governments may be forced to step in to address the problem but extreme measures such as import bans may do more harm than good.

Mr Lai's notes: remember that the resulting government intervention also counts an implication.

Essay 33 (Paper 1)

The value of a currency in a floating exchange rate system can be influenced by different factors. Explain two of them. (10 marks) (IB Specimen Paper SL for May 2022 first assessment)

A floating exchange rate system is defined as an exchange rate regime where the value of the currency is determined by the force of demand and supply.



One of the factors which influences the value of a currency is the relative interest rates of the domestic country with other countries. When a country sets higher interest rates, the rate of return of depositing money in its banks is going to be higher than if putting it in foreign banks e.g. 4% in the domestic country vs. 1% in the foreign country. Investors from abroad will be attracted to deposit their money into the domestic country's banks. In the process of doing so, foreign investors need to convert their currency into the domestic currency thus increasing the demand for the latter. In the diagram above, this is caused by a rightward shift in the demand curve from D_1 to D_2 (along S_1) and hence increasing the value of the currency from E_1 to E_2 . The value of the currency has appreciated.

Another factor which influences the value of the currency is the stability of the economy. The value of a currency is only as good as it can be used to buy goods and services and to be converted into other foreign currency. In the case of a financial crisis, where the government cannot longer finance its foreign debts or the country has been engaging in warfare in its territory, investors and holders of the currency would no longer trust the value of the

domestic currency to hold value. They will therefore dump the currency and increase the supply of it on the currency market. In the diagram above, this is shown by a rightward shift in the supply curve from S_1 to S_2 bringing about a substantial drop in the value of the currency from E_1 to E_3 .

Relative interest rates and the state of the economy can affect the value of the currency in a freely exchange regime.

Mr. Lai's notes: other factors include remittances, FDI and relative inflation rates.

Essay 34 (Paper 1)

There are consequences of a fall in a country's exchange rate. Discuss them and use real-world examples in your answer. (15 marks) (IB Specimen Paper SL for May 2022 first assessment)

An exchange rate is defined as the value of one currency relative to another. A number of situations can occur when the exchange rate falls.

A fall in a country's exchange implies that the domestic currency is less valuable compared to the foreign currency. As the purchasing power of the domestic currency has decreased, this will make exports cheaper and imports more expensive. Whilst this would increase and reduce the demand for exports and imports respectively, whether this would lead be sufficient to improve the balance of trade (where the value of exports increases relative to the fall in the value of imports) would ultimately on whether the Marshall Lerner condition is satisfied*. This condition states that depreciation only leads to an improvement in the balance of trade if the elasticities of demand for import and exports sums up to more than 1. An example of a country failing to do so is Japan in late 2022 where weak global economy meant that even though Japanese exports were made cheaper due to the falling yen, slow growth in export volume (particularly cars) led to a USD 26 billion trade deficit; the largest in 42 years. However, should the exports and imports be sufficiently elastic, it leads to an increase in net exports which would drive up net exports. An increase in net exports leads to economic growth in the form of higher GDP and greater employment opportunities for domestic workers. China has been accused of keeping the RMB at artificially low levels which has allowed it to achieve rapid economic growth in the last 40 years and become the world power it is today.

However, weakening exchange rates can lead to imported inflation which is defined as a sustained increase in price levels due to more expensive imports especially for countries that rely heavily on oil and gas imports. This may raise the cost of production and lead to the rise of domestic inflation in the country. Japan has been experiencing depreciation since 2020 (fallen 20% as of Jan 2023) and inflation has hit 3%, the highest rate since 1991 due to

increasing prices of food and energy imports. The economic consequences are much more dire if the currency falls substantially, which symbolises that the currency is no longer a store of value and cannot be a medium of exchange. Investors will flee the country as the country's economy falls apart. Due to the economic crisis in Turkey which started in 2018, the value of the Lira has fallen 80% from 2021 to early 2023 leading to an increase in inflation to 83% (a 24 year high). Many corporations who had issued foreign debt denominated in USD and EUR could not service them, plunging a number of them into default and led to a wave of public debt restructuring. The quality of debt assets for many banks e.g. Ziraat Bank, deteriorated leading to a fall in their market value. In order to stem the outflow of capital, interest rates were raised to 19% in 2021 which increased the cost of mortgages significantly and a significant decrease in home sales. This is significant as the Erdoğan led administration relied on constructions to fuel aggregate demand. High interest rates meant that many of those activities were suspended, leading to the economic crisis deepening.

A sustained falling currency can cause a downgrade in the country's credit rating as credit rating agencies may doubt the country's ability to pay back its debt. According to the international rating agency firm Standard & Poor, Turkey, Pakistan and Nigeria have credit ratings of B, CCC+ and B- which means that there is doubt whether they can repay the loan. A poor credit rating is significant for countries as that means they have to offer a much higher interest rate in order for investors to be willing to buy their debt. The cost of servicing means will limit the amount they can borrow and stimulate growth in their economy.

Due to the potentially dire consequences of a falling currency, one of the consequences of a falling currency is that the government may have to eventually step in to stop it from falling further. Japan has adopted an ultra-loose monetary policy for many years and increased divergence in interest rates with the US in recent years precipitated around a 40% decline in the exchange rate from 2020 to 2022. The decline eventually forced the Japanese government to buy yen in the foreign exchange market in September 2022, the first time since 1998. In order for the intervention to be effective, the country must have sufficient foreign exchange reserves to ensure that the prices can be propped up. In Japan's case, the intervention was not very effective as the yen continued to slide after the brief intervention. One of the

reasons is the decline in the Japanese industry's competitiveness compared to their American and European counterparts. With less Japanese goods being demanded, less yen is bought leading to a fall in the exchange rate. Raising interest rates would be a more effective way to stem the fall in the Yen as the interest rate differential between the US and Japan would lessen (hence reducing arbitrage opportunities where savvy investors borrow yen to buy USD and save it in US banks). However, this may conflict with the more pressing macroeconomic objectives such as using expansionary monetary policy to achieve economic growth. This was the case in Japan which explains why it is difficult to fully commit to stemming the fall in the currency.

A fall in a country's exchange rate could lead to an improvement in the balance of trade if demand for imports and exports are sufficiently elastic. A sustained fall in the exchange rate, especially one that is great in magnitude could lead to imported inflation and an economic crisis as there is no longer any faith in the currency as a store of value.

Essay 35 (Paper 1)

Explain how a common market is different from a free trade area. (10 marks) (Nov 2022 HL)

A free trade area and a common market are examples of trading bloc; where countries have agreed to reduce trade barriers and encourage the flow of goods, services and factors of production to varying degrees.

A free trade area (FTA) is defined as a form of trading bloc where countries start to eliminate trade barriers between themselves but retain the freedom to engage in their own trade policies with other non-member countries. Some goods are freely traded amongst the members but some form of protection may exist for other productions. An example of a free trade area is the North American Free Trade Agreement (NAFTA) which includes the United States, Canada and Mexico. One of the problems with different trade barriers to non-members countries is that products may enter the FTA through the country with the lowest barrier and resold to member countries with high barriers, thus creating a situation where the latter country may import more of the goods than they wanted to. FTAs overcome this issue using sophisticated “rule of origin” regulation to prevent this from taking place.

A common market would have no such problem as it is a form of trading bloc with a higher degree of economic integration. Member countries have no trade barriers between them and have a common trade policy with non-member countries. In addition to the absence of trade barriers, all factors of production such as labour and capital are free to flow across borders and be deployed in areas where they could be best used. An example of a common market is the European Economic Community (EEC) which was founded in 1957 and an earlier version of the present European Union. Generally speaking, common markets allow its member countries the advantage of lower prices, greater consumer choices over an FTA as the factors of production are completely flexible and greater allocative and productive efficiency is generated.

A free trade area is different from the common market from the way it is a less integrated form of trading bloc where there are no freely flowing factors of production and does not have a common trading policy with non-member countries.

Mr. Lai's Notes: being able to dive deeper and talk about the problems which FTA has but absent in a common market is a way of demonstrate strong knowledge and understanding.

Essay 36 (Paper 1)

A country decides to remain a member of a trading bloc. Evaluate this decision and use real-world examples in your answer. (15 marks) (Nov 2022 HL)

A trading bloc is defined as an organisation where countries have agreed to reduce trade barriers and encourage the flow of goods, services and factors of production to varying degrees.

A country would choose to remain as a member of the trading bloc due to the advantages it provides. These advantages are usually economic in nature. One of the biggest advantages of being in a trading bloc is the expansion of market size. This would allow for the country's national champions to sell beyond their national borders, hence increasing their country's exports and lead to greater economic growth. These are usually Multinational Corporations (MNCs) that could gain even greater access to international markets on a greater scale and greater pace hence benefiting from even greater economies of scale. Mercedes Benz's CEO Dieter Zetsche has said that being in a common market has allowed Mercedes Benz to grow its markets rapidly through the absence of trade barriers, achieving a record quarterly profit of EUR 14.8 billion in Q₁ of 2022. Higher levels of trade are further stimulated through trade creation where economic integration redirects trade from higher cost producers outside the bloc to the now lower cost producers inside the bloc due to the removal of trade barriers. However, it is important to note that higher degrees of access works both ways and exposes the country's industries to greater degrees of competition. In the most extreme cases, entire domestic industries have been wiped out under the guise of trade liberalisation such as the dairy sector in Jamaica and the rice industry in Haiti as a result of cheap subsidized imports from the US. Instead of achieving export-oriented growth, being part of a trading bloc may bring about dire consequences for the economy.

Being part of a larger market increases the country's attractiveness as an investment destination as firms identify more profitable prospects. The source of the investments could be internal (from firms inside the external bloc) or external in the form of higher levels of foreign direct investment into the country. Apart from benefiting from higher levels of profit,

foreign firms are incentivised to set up a presence within the bloc to evade the tariff or other forms of protection imposed by the trading on imports from their country. This tactic is known as tariff-jumping. An example of this are the Chinese firms that had set up operations in Vietnam to evade US imposed tariffs on Chinese imports that were imposed at the beginning of 2018. Higher degrees of investments allow for greater job opportunities and lower rates of unemployment. Arguably, it would lead to greater market efficiency as labour can travel freely in common markets trading blocs. It is important to note that this is only advantageous if the country is relatively more economically developed and mature than its member counterparts. If the member state is relatively weaker, it may lead to brain drain as the highly skilled workers move to more developed countries to seek better career prospects and a higher standard of living. Many eastern and southern EU member states suffer from this problem and it has been estimated that around 3 million Romanians, many of which are highly skilled, are currently living in other parts of the EU

Despite the challenges that being part of a trading bloc may present to a member country, being part of a trading block allows countries to have much stronger bargaining power and allow low-income countries to rely and draw on the support of the larger nations in multilateral trade negotiations. An example of this is the Latin American Integration Association (LAIA) which includes less developed countries such as Colombia, Chile and Bolivia and gives these relatively smaller states more bargaining power when negotiating with large countries such as the United States. An added advantage of this is that being part of a trading bloc, especially those of a highly integrated bloc such as a common market would reduce the likelihood of conflict between countries as they are more interdependent and of gains to be made from increasing trade, and investment activities.

Nevertheless, one of the most important aspects that aspiring countries must consider is the inevitable structural disadvantage that being a part of a trading bloc presents: the loss of sovereignty, where the severity of forgoing autonomy is inversely correlated to the level of integration. Being part of a trading bloc implies a degree of commonality e.g. a unified trading policy to non-members and surrendering a degree of autonomy and discretion.

In one of the most extreme cases such as the monetary union, there is one central bank which sets interest rates for the entire European Union meaning that national governments do not have the ability to use monetary policy to achieve macroeconomic objectives in their countries such as economic growth. This is especially so for countries undergoing a recession and may experience further worsening as contractionary monetary policies are being implemented. An example of this is Greece where after defaulting on its loan payments to the IMF in 2015, it was not able to employ expansionary monetary policy to lift its country out of recession. The fact that it used the Euro also meant that it could not devalue its currency to make exports cheaper and achieve higher levels of GDP through higher imports.

Being part of a trading bloc brings about advantages such as increased market access, profit making opportunities for firms which leads to greater levels of investment and lower levels of unemployment. It is important to note that these advantages are skewed towards more developed countries within the trading bloc. Less developed countries may suffer from brain drain and the loss of sovereignty and inability to use various policy tools in times of economic crisis. A member state ought to evaluate where it is in the pecking order and weigh up its benefits and costs in deciding whether to remain a member state.

Essay 37 (Paper 1)

There exists advantages and disadvantages for a country of being a member of a trading bloc. Discuss them and use real-world examples in your answer. (15 marks) (May 2022 HL)

A trading bloc is defined as an organisation where countries have agreed to reduce trade barriers and encourage the flow of goods, services and factors of production to varying degrees.

The advantages for a country of being a member of a trading bloc are many. One of the biggest advantages of being in a trading bloc is the expansion of market size. This would allow for the country's national champions to sell beyond their national borders, hence increasing their country's exports and lead to greater economic growth. These are usually Multinational Corporations (MNCs) that could gain even greater access to international markets on a greater scale and greater pace hence benefiting from even greater economies of scale. Mercedes Benz's CEO Dieter Zetsche has said that being in a common market has allowed Mercedes Benz to grow its markets rapidly through the absence of trade barriers, achieving a record quarterly profit of EUR 14.8 billion in Q₁ of 2022. Higher levels of trade are further stimulated through trade creation where economic integration redirects trade from higher cost producers outside the bloc to the now lower cost producers inside the bloc due to the removal of trade barriers. However, it is important to note that higher degrees of access works both ways and exposes the country's industries to greater degrees of competition. In the most extreme cases, entire domestic industries have been wiped out under the guise of trade liberalisation such as the dairy sector in Jamaica and the rice industry in Haiti as a result of cheap subsidized imports from the US. Instead of achieving export-oriented growth, being part of a trading bloc becomes a significant disadvantage and may bring about dire consequences for the economy.

Having access to larger markets directly leads to other advantages; namely increasing the country's attractiveness as an investment destination as firms can identify more profitable prospects. The source of the investments could be internal (from firms inside the external bloc) or external in the form of higher levels of foreign direct investment into the country.

Foreign firms are incentivised to set up a presence within the bloc not only for profit making reasons per se. Many of them set up operations within a bloc to evade the tariff or other forms of protection imposed by the trading on imports from their country. This tactic is known as tariff-jumping. In recent years, Chinese firms have set up operations in Vietnam to evade US imposed tariffs on Chinese imports that were imposed at the beginning of 2018. Higher degrees of investments allow for greater job opportunities and lower rates of unemployment. Arguably, it would lead to greater market efficiency as labour can travel freely in common markets trading blocs. It is important to note that this is only advantageous if the country is relatively more economically developed and mature than its member counterparts. If the member state is relatively weaker, it may lead to brain drain as the highly skilled workers move to more developed countries to seek better career prospects and a higher standard of living, hence becoming a disadvantage for the member state. Many eastern and southern EU member states suffer from this problem and it has been estimated that around 3 million Romanians, many of which are highly skilled, are currently living in other parts of the EU

Despite the challenges that being part of a trading bloc may present to a member country, being part of a trading block allows countries to have much stronger bargaining power and allow low-income countries to rely and draw on the support of the larger nations in multilateral trade negotiations. An example of this is the Latin American Integration Association (LAIA) which includes less developed countries such as Colombia, Chile and Bolivia and gives these relatively smaller states more bargaining power when negotiating with large countries such as the United States. An added advantage of this is that being part of a trading bloc, especially those of a highly integrated bloc such as a common market would reduce the likelihood of conflict between countries as they are more interdependent and of gains to be made from increasing trade, and investment activities.

Nevertheless, one of the structural disadvantages of being integrated to a trading bloc is that it necessarily leads to the loss of sovereignty, where the severity of forgoing autonomy is inversely correlated to the level of integration. In one of the most extreme cases such as the monetary union, there is only one central bank (European Central Bank) which sets interest rates for the entire European Union meaning that national governments do not have the

ability to use monetary policy to achieve macroeconomic objectives in their countries such as economic growth. This is especially so for countries undergoing a recession and may experience further worsening as contractionary monetary policies are being implemented. An example of this is Greece where after defaulting on its loan payments to the IMF in 2015, it was not able to employ expansionary monetary policy to lift its country out of recession. The fact that it used the Euro also meant that it could not devalue its currency to make exports cheaper and achieve higher levels of GDP through higher imports.

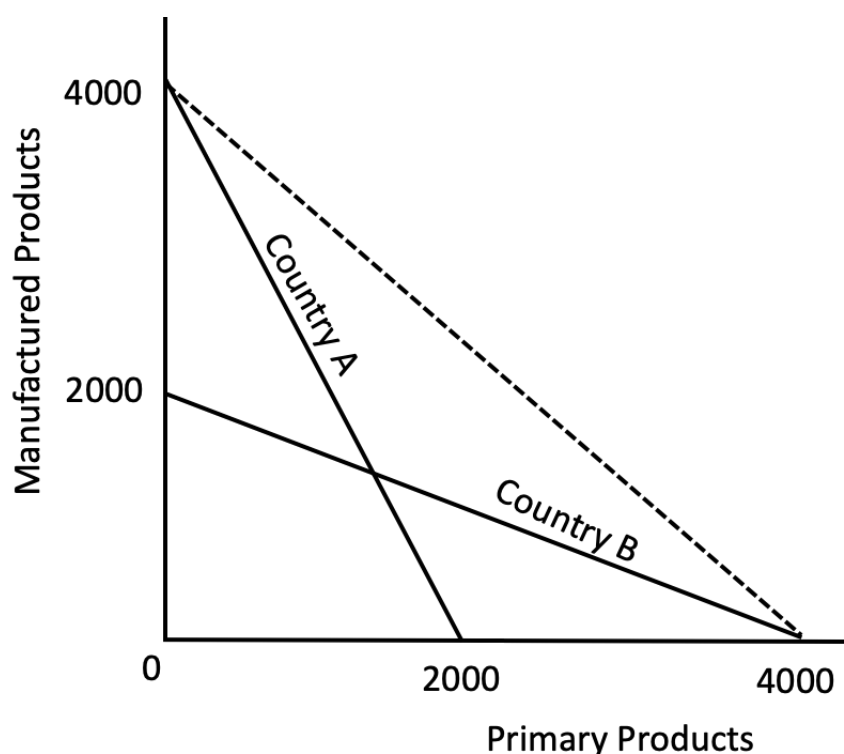
Being part of a trading bloc brings about advantages such as increased market access, profit making opportunities for firms which leads to greater levels of investment and lower levels of unemployment. It is important to note that these advantages are skewed towards more developed countries within the trading bloc. Significant disadvantages may be presented to less developed countries where brain drain could occur and the inability to use various policy tools in times of economic crisis due to the loss of sovereignty. These disadvantages may be presented to more developed countries, but to a lesser degree.

Mr. Lai notes: compare this model answer with Essay 36. Whilst the content is very similar, note how the topic sentences have been written differently to answer the specific demands of the question. Being able to write good topic sentences is critical for succeeding in writing high quality economics essays.

Essay 38 (Paper 1)

In accordance to the theory of comparative advantage, countries often specialized and trade. Explain the limitations of this approach. (10 marks) (May 2022 HL)

The theory of comparative advantages provides an argument for liberalising and encouraging international trade as each country has gains to be made from engaging in trade. Each country, regardless of its size, has goods and services that they are able to provide at a lower opportunity cost and enjoy a comparative advantage in. Through specialising in the good or service that they could produce at a lower opportunity cost, the total production of goods and services that is produced is greater than if they produced both goods and services by themselves. Trading can then occur between countries to exchange for goods and services that they respectively need. In the diagram below, Country A has a comparative advantage in manufactured products and Country B in primary products. Trading allows them to consume beyond their own productive possibility frontiers (dotted line)



A major limitation of this approach is that it assumes that countries only specialise and trade for economic reasons but in reality (and increasingly so), geopolitical reasons play a very important role in determining what products a country specialises in making. Since 2019,

trade tensions between the US and China have increased and many technological products such as computer chips can no longer be exported in China. In order to avoid its technological progress from being halted, the Chinese government has invested its attention to making advanced computer chips through its Semiconductor Manufacturing International Corporation (SMIC) even though it has far less human capital and tools e.g. EUV lithography systems compared to other countries such as Taiwan and South Korea.

Furthermore, the theory of comparative advantage assumes that factors of production are immobile and inflexible meaning that countries will specialise in the same goods and services to perpetuity. However, this is not necessarily true especially in the age of globalisation which allows human labour, capital and resources to be redistributed more efficiently. This is especially true within trading blocs such as the European Union where human capital can freely move around. This has allowed places such as Shenzhen in China which has historically been a manufacturing center to be transformed into a technology hub that houses the headquarters of tech companies such as Tencent.

Finally, the theory of comparative advantage assumes that trade is frictionless and costless implying trade always occurs. However, transport costs can be significant, especially for goods which are great in size and weight, which may mean that no gains of trade can occur once such costs are considered. Countries may find it economically more plausible to produce the goods and services in their own country. In China, instead of importing cars from abroad, many foreign brand cars such as BMW and Honda are made through joint venture companies such as Brilliance Auto in China to reduce the transport costs of shipping cars over from Germany and Japan. If foreign companies were not able to set up ventures in China, they may not trade cars to China or might be at a smaller scale.

The theory of comparative advantage that proposes specialisation is limited by the assumptions it makes about the absence of transport costs, the immobility of the factors of production and trading only occurs for economic reasons.

Mr Lai's notes: this question is a bit unclear because the theory of comparative advantage is not really an approach but a theoretical justification for trading. As with all theories, there are assumptions that drive the proposition and this question is asking about which of these are unrealistic that limits the application of the theory.

Essay 39 (Paper 1)

Political and social factors can act as barriers to economic growth and development.

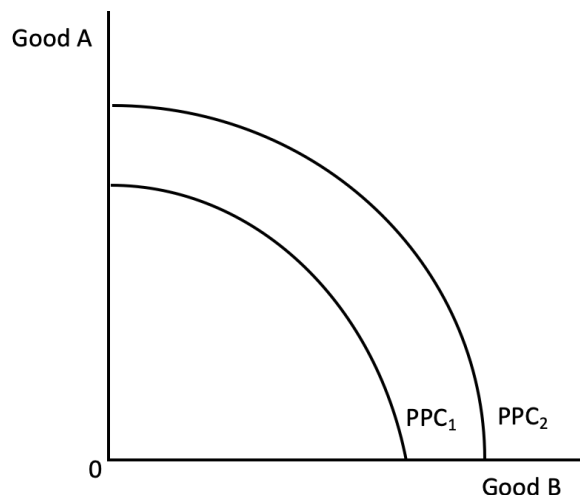
Explain how this is the case. (10 marks) (May 2022 HL)

Economic growth can be defined as an increase in national output usually measured by GDP or GNP. Political factors refer to factors related to the government or stakeholders related to the governance of a country. Social factors refer to factors related to the social environment, demographic makeup of a country.

A weak institutional framework such as a poor legal system with poor law enforcement is a political factor that is a barrier to economic growth. At the heart of the market economy is the notion of property rights. Producers are able to sell their products at a certain price in exchange of money because they own the goods or service and the associated factors of production in the first place. Firms are willing to invest in a country because they know that their investments belong to them and the state will acknowledge their ownership over them. When a party tries to take their properties from them, the state's legal and enforcement system will step in to address the problem. A weak legal system implies that producers and investors may not feel completely certain over their ownership of the properties and belongings, hence decreasing their willingness to operate within the country and slowing down rate of economic growth. This is particularly so for countries with an authoritarian system and investors do not know whether the state would seize their assets to achieve their own purpose. Corruption is a hallmark of weak institutions and acts as a major barrier to economic growth as powerful players drain the country's resources and make decisions that serve their interests only instead for the good of the country.

A tax structure that is politically motivated may prohibit economic growth from taking place as fast as it could. Many governments use the tax structure to serve its own political purposes by setting a progressive tax system where the wealthier populace is taxed at a higher rate. This would cater for the narrative of redistributing wealth to the poor by taxing the rich; which could be especially attractive during election years. However, this may be a barrier to

economic growth as the country's elite may simply leave the country for other states with lower tax rates thereby shrinking the tax base of the country.



Gender inequality is a social factor that can inhibit economic growth as it limits the quantity and quality of human resources available to an economy. When females are only perceived to serve the function of bearing children; which is prevalent in underdeveloped countries where approximately 15 million girls under the 18 get married according to UNDP's Human Development Report in 2016. The lives of these women are limited to a domestic role and greatly limits their ability to realise their productive potential by pursuing careers. Their mobility is also different from their male counterparts. There are 32 countries where the process of getting passports for females is different from males and there are 18 countries where permission from their husband is required before they can get a job. This is not to mention there are some countries where women are not allowed to drive, work with men or vote and these are all factors that hinders productivity and national output, not to mention the general welfare to women. In the diagram above, the economy could be operating at PPC_2 with higher economic output but is limited to only PPC_1 as women are not allowed to work in the labour force.

A weak institutional framework such as a poor legal system, a politically motivated tax structure and gender inequality are examples of political and social factors that can act as barriers to economic growth.

Mr. Lai's notes: the examiners deliberately did not ask about economic barriers which have more coverage in the syllabus and instead asked about something more niche. Remember, anything could be asked in the exam.

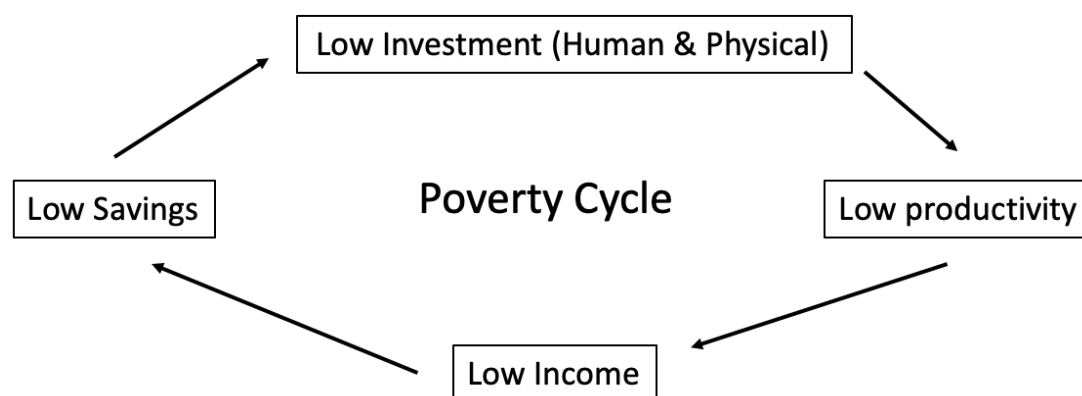
Essay 40 (Paper 1)

A country's economic growth and economic development is affected by economic barriers.

Discuss the significance of such barriers and use real-world examples in your answer. (15 marks) (May 2022 HL)

Economic barriers refer to obstacles that are related to the economic structures of an economy to achieve an objective. The objective in this question refers to economic growth which is defined as an increase in the country's national output and economic development which is a more holistic approach to growth which may include other indicators such as standard of living and level of education.

This essay will show that economic barriers inhibit a country's growth and development but can be mitigated through appropriate government intervention.



The poverty cycle is one of the most significant barriers to growth and development. The cycle is a vicious circle where poor people cannot escape poverty due to the low levels of investment in physical and human capital due to the low levels of saving. The opportunity cost of sending their children to school is high as it would mean less income generated for their family in the short term; something these families may not be able to afford given that

their livelihoods are at stake. An example of this is Nigeria where 44% of its 216 million population is regarded as extremely poor and lives below \$2.15 a day and 90% of its population are regarded as generally low. Investment in physical capital is low as there is not much money left over for saving with incomes being so low. This has a ripple effect on other potential growth channels such as the inability to procure the loan as the risk of default is very high and they have no collateral to pledge against. The situation has worsened in recent years due to climate change and conflict in the northern and southern parts of the country, not to mention the devastating effects of the COVID-19 pandemic. Whether the populace can escape the poverty cycle depends on the extent to which the government can lower the opportunity cost for families to send their children to school. This not only involves providing free education but income support for families to compensate for the loss in income whilst their children are in school. In Nigeria's case, having sufficient budget is secondary to having the political will to implement this initiative given the fragmented power structure within the country and the lacking power of the country's executive branch.

Lack of infrastructure and appropriate technology is another significant barrier to economic growth and development. Infrastructure can include transport networks such as roads, bridges and railway, utilities such as water and electricity and buildings. An economy grows through conducting economic transactions and the lack of infrastructure inhibits the market from functioning efficiently e.g. lack of roads inhibits the delivery of goods. Due to the civil war, 50% of Syria's infrastructure was non-operational due to its destruction and 34,000 buildings were damaged or destroyed just in the region of Eastern Ghouta. GDP in 2017 was only USD 16 billion which is a substantial decrease from USD 252 billion in 2010. Given the importance of infrastructure to an economy, economically ambitious countries such as China have invested aggressively on large scale projects such as high speed railway and the Three Gorges Dam. Around 42,000 km of high speed rail networks have been constructed by the end of 2022 with around USD 900 billion invested in the project. The Three Gorges Dam cost USD 37 billion and was built to produce hydroelectricity and increase the Yangtze River's shipping capacity as well as reducing the risk of flooding in the lower plains. However, over-investment into infrastructure can prove to be detrimental to the economy. The Chinese government is aiming to increase the length of rail to 50,000 km in 2025 and 70,000km in

2035 which requires an additional RMB 3.6 trillion. With this come concerns whether the Chinese government can finance such a big project and whether the economic profits justify such a big investment outlay. Some have argued that local authorities have approved of this project even if the economic benefits are limited with the short term view that such investment will bring about employment opportunities for its populace. The standards of living of millions of people are also affected as they have been forced to move to make way for the high speed rail project.

The existence of an informal economy is another economic barrier that can prevent an economy from growing and developing. The informal economy refers to the economic activities that have economic value but are not formally registered with the government. In many African countries, this could be street hawkers and vendors. These activities are not necessarily illegal such as self-employed businesses e.g. cars for hire that are mainly cash businesses. The problem with the informal economy is that tax revenue is not collected from them meaning that there is less money than otherwise to fund government expenditure. Whilst the government is providing public goods such as infrastructure (roads and bridges) and services (state education) to the informal sector, the informal sector is not contributing to tax income hence straining the economy more and more financially. Pakistan has around 60% of the workforce and more than 70% of its non-agricultural workforce in the informal economy which means that only around 40% of the workforce is contributing to government expenditure. More problematic for growth and development in the long run is that the informal economy is not monitored and regulated meaning that its workers could be subject to poor working conditions and there would not be established channels to address them. Due to the lack of information, government policy cannot be conducted effectively to enable these businesses to grow into medium sized businesses and beyond. The handicraft and cottage industry are two industries that have extremely low levels of registration but employ a significant number of people in Pakistan. Note that the above does not cover the illegal activities that exist in the informal sector such as the drug trade and arms dealing.

Economic barriers are significant barriers to economic growth and development as they inhibit economic activity from taking place and effective policies to be conducted to take the

economy to the next stage. Unfortunately, economic barriers are often accompanied by political and social barriers such as gender inequality which makes achieving economic growth and development even more difficult.

Mr. Lai's notes: overdependence on the primary sector, and lack of access to international markets are other forms of economic barriers. 2) A good answer could also evaluate the significance of economic barriers to political & social barriers.

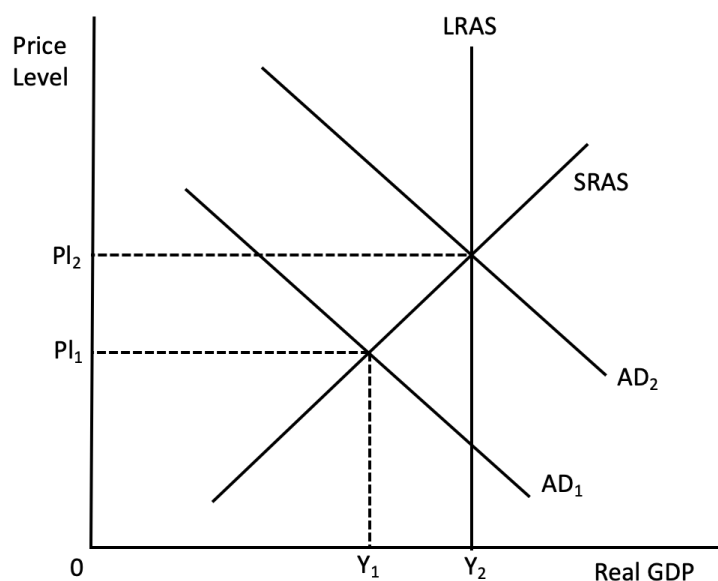
PAPER 2 15-MARK QUESTIONS (THE GLOBAL ECONOMY)

Essay 41 (Paper 2)

Discuss methods that the Nigerian government might employ to achieve greater economic growth and/or economic development. Use information from the text/data and your knowledge of economics in your answer. (Q1g Official IB Specimen Paper HL+SL)

Economic growth is defined as the increase in macroeconomic output indicators such as GDP and GNP whereas economic development is a more holistic assessment which reflects standards of living aspects such as education, health and level of corruption in the country.

One of the ways which economic growth and development can be adopted by the Nigerian government is the investment in education. Investment in education is a supply side policy that increases labour productivity as people are equipped with the knowhow and skills to produce goods and services in an economy, hence leading to higher national income. Education enlightens the mind and allows people to make better consumption choices (consuming more merit goods and less demerit goods e.g. cigarettes) and hence achieve higher standards of living. However, statewide education (especially a free programme) is expensive to finance and requires a strong source of government revenue to support it. Falling revenues due to falling oil revenues may result in difficulties in funding statewide education, and the capability to raise expenditure through issuing debt is increasingly limited with external debt and percentage of public debt relative to GDP. Furthermore, an effective education programme also relies on sound implementation through good pedagogy and educational design. This does not seem to be the case with Nigeria where literacy rates have remained at 51% from 2010 to 2014.



Another way which economic growth and development can be achieved through expansionary fiscal and monetary policy. Expansionary policy can be carried out through lower taxes and high government spending which could lead to higher aggregate demand (AD) through an increase in consumption, investment government spending and net exports which are all components of AD. Expansionary monetary policy through lowering interest rates has similar effects (higher consumption and investment) as it makes borrowing cheaper to fund consumption and investment activities. A demand led growth would initiate a virtuous circle involving more revenue for businesses, leading to higher employment and income and leading to further increases in consumption and investment. Graphically this is shown by a rightward shift in the AD curve from AD_1 to AD_2 hence increasing real GDP to Y_2 . However, adopting such policies might have limited effect in Nigeria since the tax base in most African countries is very small given the large size of their informal economies and it is likely the case is the same for Nigeria. Furthermore, lowering interest rates may not be possible at all given that the naira has collapsed in value (55% against the USD) when it abandoned a fixed

exchange rate against the USD and the central bank is in dire need to attract capital inflow via higher interest rates.

In order to achieve long term growth, the Nigerian government can create a strong institutional framework to enhance productivity. A strong legal system that establishes property rights and human rights clearly underpins the mechanics of a strong market economy and forms the basis of strong investor and business confidence. A strong legal system is coupled with effective law enforcement agencies that prevents corruption from taking place and establishes a stable business environment where contracts are honoured and breaking the law leads to consequences. However, it seems that corruption is a deep rooted issue in Nigeria (although the government is addressing it) and more importantly, the country is under threat from terrorist attacks from Boko Haram, the extremist group which has reportedly destroyed infrastructure and killed people in the area. Unless the Nigerian government can eliminate this threat, the country will be deemed risky by developed nations and hence discouraging the much needed investment to fund capital projects in the country.

Investment in education, expansionary fiscal and monetary policies and the creation of strong institutional frameworks are ways which the Nigerian government can generate economic growth and development, but there are entrenched problems such as corruption and a low valued currency that may affect their effectiveness.

*Mr. Lai's Notes: In all paper 2 15-mark questions, discuss ways which both economic growth (increase in real GDP) **and** economic development (standards of living is achieved).*

Essay 42 (Paper 2)

Discuss possible economic outcomes for economic growth and economic development that might arise from Mexico's current international trade prospects. Use information from the text/data and your knowledge of economics in your answer. (Q2g Official IB Specimen Paper HL +SL)

Economic growth is defined as the increase in macroeconomic output indicators such as GDP and GNP whereas economic development is a more holistic assessment which reflects standards of living such as education, health and level of corruption in the country. Mexico's current international trade prospects are influenced by a number of factors that determine its economic growth and development outcomes.

The most noticeable factor is the substantial depreciation of the pesos which implies that the pesos is less valuable compared to the foreign currency. As the purchasing power of the pesos has decreased, this will make exports cheaper and imports more expensive. Whilst this would increase and reduce the demand for exports and imports respectively, whether this would be sufficient to improve the balance of trade (where the value of exports increases relative to the fall in the value of imports) would ultimately depend on the Marshall Lerner condition being satisfied. This condition states that depreciation only leads to an improvement in the balance of trade if the elasticities of demand for import and exports sums up to more than 1. However, should the exports and imports be sufficiently elastic, it leads to an increase in net exports which would drive up net exports. An increase in net exports leads to economic growth in the form of higher GDP and greater employment opportunities for domestic workers. It must be noted that greater employment opportunities would only translate to higher levels of development if workers are able to work in safe environments where they are not exploited, something that cannot be taken granted in less developed countries where companies attempt to lower costs.

Given that Mexico has a freely floating exchange rate regime, the current account and depreciation of the pesos should self-correct in the long run. Theoretically, reduced demand for imports because it is now more expensive due to the weaker pesos will make it cheaper

in the long run, and hence increasing the demand for it and vice versa for exports. In reality however, the depreciation's impact on import prices have been limited and inflation has only been reduced to slightly below the target of 3% implying that the trade balance will worsen in the long run as consumers continue to import expensive goods.

The Mexico government is limited in the way it could further boost net exports by through depreciation because the rapid fall of the currency is leading to a crisis of confidence in the pesos. Further falls would mean that the pesos is no longer an effective store of value, possibly leading to a collapse in the economy as the government can no longer service its (growing) foreign denominated debt of USD 484.6 billion. Economic growth and development would be seriously affected as unemployment spikes and people are not able to earn any income. For this reason, the Mexico government is forced to raise interest rates to 4.25% to attract capital to enter/remain in its banking system and stem the fall of the pesos. However, this monetary contractionary stance would make consumption and investment more costly as it raises the cost of borrowing. This would lead to a fall in aggregate demand leading to a lower level of income and increasing the level of unemployment. This is particularly impactful on the oil industry (a key industry) where output has been falling from the older oil fields and investments in the exploration for new oil fields are already at an insufficient level. The fall in export and the rising cost of investment would reduce annual growth rates by 0.5% leading to a fall in incomes and declining standards of living. The loss in government revenue in the form of taxes may put pressure on government spending on public goods such as education and health, hence negatively impacting economic development even more. This presents a worrying picture as Mexico is only ranked 74th in the Human Development Index and the increasing Gini coefficient of 0.4821, implying worsening income inequality and is set to worsen even more with falling government spending on the said merit goods.

The international trade prospects looks grim as the US government continues to impose tariffs on Mexico, citing that its sugar industry is heavily subsidised compared to their US counterparts. If the accusations are true, this means that the Mexico government's attempt to grow via its net exports by subsidising the sugar industry is largely ineffective as any price advantages will be dented by the higher US tariffs. An indirect form of money transfers takes

place where the subsidies translate into US tax revenue, hence failing to generate the growth and benefiting the stakeholders, its producers and industries that it intended to. Time is somewhat of concern for the Mexican government to explore further avenues of growth as the current account deficit hovers around USD 30 billion meaning that it is buying more imports and that it is earning through exports. At the moment, the trade deficit is being sustained by the inward flowing FDI USD 32.1 billion (in 2016) but relying on FDI implies a growing loss of sovereignty as pieces of the economy are sold off to foreign investors.

The international trade prospects for Mexico spells a worrying picture for the country's growth and development. Whilst the falling value of the pesos should improve the balance of trade, the stubbornly high import prices and weak export industry (oil) is preventing export oriented economic growth from taking place. This is worsened by the fact that the government is forced to raise interest rates to stem the rapid fall in the pesos, hence pulling back aggregate demand and the level of economic output. Currently, the current account deficit is being sustained by FDI but there may not be any scope of further export-led growth with the US taking a hostile stance to Mexico in its trade relations.

Mr Lai's notes: international trade is inextricably linked to the exchange rate, trading relations and the presence of trade barriers. Being able to identify these factors and explain their impact effectively will enable students to do well in this question.

Essay 43 (Paper 2)

Discuss the view that trade with Japan is more beneficial for Vietnam's economic development than foreign direct investment (FDI) from Japan. Use information from the text/data and your knowledge of economics in your answer. (Q1g May 2022 HL)

Economic trade is defined as the exchange of goods and services via imports and exports between countries whereas FDI is defined as the purchase of a particular organisation's interest by another foreign organisation.

Trading with Japan brings about a number of significant benefits to Vietnam. Firstly, by specialising in goods and services that gives in a comparative advantage and trading with Japan, it will allow Vietnam to consume at a level beyond its production possibilities curve (PPC) and allow it achieve a higher standard of living. Furthermore, it will create growth opportunities for its exporting industries such as seafood and consumer products (textiles and leather goods) as it expands into international markets and creates further employment opportunities in these industries. With increasing revenue, such as those earned by lychee farmers, successful firms can use the proceeds to drive the process of consolidation in the farming industry through mergers and acquisitions. This will allow them to be more efficient and enjoy greater economies of scale, hence overcoming the problem of having too many inefficient small farms.

However, it is important to note that since Vietnam is mainly a primary good exporting country, trade volumes with Japan may be disrupted via supply shocks such as adverse weather leading to volatile prices as primary goods typically exhibit inelastic demand and supply due to its relatively low value. Even if export demand continues to be strong, the exploitation of natural resources such as land and fisheries may mean that long-term growth in Vietnam is affected. Furthermore, the focus on export-oriented manufacturing which is driven by the process of industrialisation has created significant negative effects on the environment. Electricity consumption has tripled since 2010 and accounts for 60% of Vietnam's carbon emissions. With the demand for water continuing to increase, it is not

certain how much pressure the ecology of the country can withstand, which could be detrimental to environmental sustainability in the long run.

Accepting FDI from Japan results in targeted financial support for key aspects of the economy with faster results. For example, whilst export related growth may generate tax revenues to build critical infrastructure, FDI is much more immediate as its effectively a direct cash infusion. This can be seen in the Japanese aid directed at required infrastructure which was successful in improving Vietnam's economic capacity. This also applies to other areas such as the introduction by the Japanese of more technology that has led to the improved level of human capital, greater technical knowhow and the enabling of more exports of manufactured goods, thus leading to further economic growth. Further value was added in the primary products Vietnam produced, hence allowing it to avoid the economic problems associated with focusing on primary product exports and increasing living standards in rural areas. However, it must be noted that Japanese investment is fundamentally focused on making profits and thus has a tendency of focusing on urban areas where business opportunities are of greater value i.e. more profitable. This could have played a role in increasing inequality as reflected in the rise of the Gini-coefficient in Table 2. The drive to profitability is apparent from the fact that Japanese firms are taking advantage of the low-cost labour which may lead to worker exploitation. The relatively relaxed environmental regulations may mean that more factories and coal-fire plants will be built, hence affecting economic development in the long term. Furthermore, attracting FDI fundamentally involves giving up more stakes in the economy, meaning that more ownership control of infrastructure and large scale projects is yielded to Japan in exchange for more immediate monetary input.

In order to attract FDI, the government is incentivised to create the infrastructure e.g. roads and bridges required for foreign businesses to operate, which has an opportunity cost of less government spending on health and education. It must be noted that the massive spending on infrastructure is unlikely to be recuperated via tax revenue from foreign revenue in the short run as foreign firms were offered tax treatment to attract them to invest in the first place.

One must appreciate that trade and FDI are not substitutes of one another and neither are they mutually exclusive. Whilst export oriented growth allows Vietnam to grow at its own pace and minimise the environmental impacts on its country, FDI is a powerful catalyst for Vietnam to start exporting higher valued goods such as manufactured products. It cannot be argued that one is superior than the other, and the government needs to review which economic stage the country is at to determine which policy is more appropriate to implement.

Essay 44 (Paper 2)

Evaluate the government's policies to promote economic growth and economic development in Malawi. Use information from the text/data and your knowledge of economics in your answer. (Q2g May 2022 HL)

Economic growth is defined as the increase in macroeconomic output indicators such as GDP and GNP whereas economic development is a more holistic assessment which reflects standards of living aspects such as education, health and level of corruption in the country.

One of the major policies introduced by the Malawi government is the improvement of human capital through increasing spending on education and health so that farm workers can be more productive. Standards of living will also improve when people can make more informed decisions regarding health, nutrition and the consumption of merit goods. This will prove to be very effective as human capital is an especially important resource in a labour intensive society such as Malawi. It will provide more job opportunities for women and hopefully lessen gender inequality and improve health and education indicators such as school enrolment that hovers around only 40% in 2018. Education and training is in dire need in rural areas where 85% of the population lives and the providing training for people in rural areas will hopefully lead to lower geographical inequality (compared to urban areas). However, education is expensive and the government needs to procure funds beyond its current budget as the budget deficit is very large and government debt and debt servicing costs are rising steeply. With the impacts needing time to materialise.

Using aid from overseas to invest in infrastructure may be a more viable option as the budget deficit will be impacted as much if they are given in the form of grants. If the aid is given in the form of training and development from workers, then they can learn from overseas technology. On the other hand, if the aid is given in the form of low interest loans, the money will have to be repaid, raising the level of debt servicing costs. Also, any tied aid given may come with certain conditions such as the liberalisation of the domestic economy which may impose pressure on domestic firms and only opens the door for foreign firms to own critical resources and destroy the fragile domestic industry in the country. Tied aid may also come

with certain conditions of using technology which may be inappropriate and it usually requires more imports that could worsen the deficit on the balance of trade. The aid may end up addressing economic issues superficially whilst creating negative repercussions in other areas and impeding development in the long term.

The Malawi government also proposed to use export promotion strategies rather than import substitution strategies to achieve economic development and growth. Assuming that the country is going to specialize, there will be gains of trade to be made from the theory of comparative advantage, hence allowing there to be higher levels of economic growth. The reduction in tariffs will also result in cheaper imports and raise standards of living as people's purchasing power increases. However, the focus on cash crops that will be exported may imply that there will be support for small farmers and increase the level of food insecurity. A focus on primary products as the main source of income means that supply shocks will be more pointed. Whilst a reduction of tariffs may make goods cheaper, the fall in tax revenue will further add to the budget strain felt by the government and impose a higher degree of competition for domestic suppliers.

Perhaps it is good that the government is diversifying its dependence on maize and on tobacco exports towards cotton, nuts, tea, and sugar; hence spreading the risk around. This is much more sustainable and focuses on producing products which have higher export revenues, therefore achieving greater economic growth. However, this does not evade the key issue that primary products have low value and are susceptible to volatile prices as the price elasticity of demand for these products are high, leading to lower earnings in the future. To truly avoid this problem, firms should switch to higher value added manufacturing and processing which would demand significant capital investment that the country may not have currently.

The host of policies introduced by the Malawi government brings about economic growth and development and many of them have repercussions that the government needs to be aware of when implementing them.

Mr. Lai's notes: the essay asks for an evaluation of the policies. Notice how instead of simply listing out the advantages and disadvantages, the merits and shortcomings of each policy are weighed in a more nuanced manner allowing the discussion to be more holistic.

Essay 45 (Paper 2)

Discuss the likely economic effects on North Macedonia of its entry into the European Union (EU) Common Market. Use information from the text/data and your knowledge of economics in your answer. (Q1g May 2022 SL)

The European Union is a monetary union which comprises the features of a common market and operates under a single monetary structure with one central bank and one currency. A common market is a type of trading bloc where no trade barriers exist between member countries and the bloc has a common trade policy to non-member countries. Factors of production are freely mobile between member states.

A country usually gains entry to a trade bloc for the economic advantages that it reaps and a number of advantages is presented to North Macedonia. The biggest advantage of being a trade bloc is the enlargement of the accessible market. The increase in trade opportunities could increase exports and reduce the current account deficit and lead to an aggregate demand (AD) induced economic growth. Furthermore, the increase in trade may pressure domestic champions to become more efficient, as the result of free access to other countries would allow them to benefit from economies of scale and improve the allocation of resources. However, it must be noted that North Macedonia already engages in free trade with EU countries in a wide variety of goods and services and so the increase in trade even if it joins the EU may be muted. Furthermore, the higher degrees of access works both ways and exposes North Macedonia industries to greater degrees of competition and may be significantly outcompeted by their much stronger and industrialised counterparts. Currently, quotas are in place to protect wine, beef and fish industries and the removal of them would only expose them to more competition but also worsen the existing trade deficit as more imports are being bought.

Being part of a common market implies the absence of barriers for the factors of production (human or physical capital) to freely move around different member countries and allow them to be more effectively utilised. North Macedonia suffers from high levels of unemployment, especially amongst youth and the growing investments in the country

(especially as it gains entry to the EU) can absorb some of the surplus labour in the market. This will increase the level of the people's income and reduce the number of people living under the poverty line (20% currently). However, youth unemployment can probably only be addressed in the long term as the unemployment is structural in nature and time is needed for the youths to be retrained, even if funds are available from the EU to aid its reforms. The excerpt explicitly says that existing skills mismatch is a major reason deterring foreign companies from investing into the country.

It must be noted that the benefits may not be brought enough to stem the brain drain in North Macedonia where 20% of the population has already emigrated from the country. If anything, the country's membership in the EU may further exacerbate the level of brain drain in the country as elites move to better prospects in other parts of the EU. This could be particularly worrying for those working the agricultural sector who are probably more lowly paid than their manufacturing counterparts and contribute to 10% of the country's GDP.

What is favourable to North Macedonia's long term development is that its entry to the EU is preceded with the implementation of a series of supply side policies to allow its firms to be more globally competitive. The policies are funded by the EU (ERU 633 received) and seeks to improve the international competitiveness of the country's industries, build infrastructure and train its workers to be more productive. It is good to see that progress is taking place since the reforms have been implemented in 2014 and export manufacturing is now more diversified and focused on higher value products. Whether this could be sustained would depend on the government's ability to continue financing supply side initiatives, a scenario that is unlikely given its tight fiscal state (only USD 3.3 billion in foreign reserves). FDI could have financed some of these initiatives (USD 476.9 in 2019) but may result in further loss of sovereignty as equity stakes in projects are being sold off to foreign parties.

North Macedonia must be mindful of the inevitable structural disadvantage that being a part of the trading bloc presents: the loss of sovereignty, where the severity of forgoing autonomy is inversely correlated to the level of integration. For example, the EU requires North

Macedonia to adopt measures to protect the environment more and they have switched its energy source from coal to renewable energy sources such as solar and wind. Whilst this would reduce the level of air pollution and lead to higher standards of living, this will raise the cost of production, especially when new capital equipment is bought, hence applying more financial pressure on existing firms and the government's budget.

Joining the EU would allow North Macedonia to enjoy a larger market and funding to improve its supply side economy. However, the removal of trade barriers would impose competitive pressure on its domestic economy and may open the floodgate to further brain drain as its citizens seek better prospects abroad. The government's resolve and ability to generate sufficient economic growth in a set period of time is key to determine whether being in the EU will be advantageous to the country in the long run.

Essay 46 (Paper 2)

Evaluate the impact of government intervention in promoting economic growth and economic development in Sierra Leone. Use information from the text/data and your knowledge of economics in your answer. (Q2g May 2022 SL)

Economic growth is defined as the increase in macroeconomic output indicators such as GDP and GNP whereas economic development is a more holistic assessment which reflects standards of living aspects such as education, health and level of corruption in the country.

Conscious of its growing government debt which is 62% of GDP in 2019, the government has reduced its budget deficit from 5.7% to 3.4% of GDP by enforcing tax payments more rigorously and reducing hiring as many people through automation of government services. Apart from reducing economic growth via a lower level of aggregate demand (AD), this may lead to higher levels of unemployment (depending on the scale of the redundancy). Should the cost cutting measures be extended to expenditures on health and education, then social welfare will also be negatively impacted. The budget deficit is further addressed by removing the fuel subsidy. Whilst this would have the effect of reducing the negative externalities that are associated with burning of fossil fuels e.g. emission of carbon pollutes the environment, this would undoubtedly affect the welfare of the poorest; which are those who are most vulnerable. Since fuel is widely used in many different industries, the removal of the subsidy may lead to cost push inflation and adversely affect its efforts to diversify the economy.

However, it is uncertain to what extent the budget deficit is going to be reduced seeing that there are a number of large scale education initiatives that the government is introducing as part of its new development plan. In order to raise the quality and quantity of its human resource capital, the government is planning to offer free primary and secondary schooling for the nation's children. This will allow families paying for private tuition to switch their expenditure on essential services and items such as farming equipment, hence breaking the poverty cycle through greater physical and human capital investments. With greater knowhow and more specialised farming knowledge, it is hoped that primary producers would be able to achieve food security. The investment in education also aspires to train its people

to work in the secondary sector, as the manufacturing sector only forms 2% of the country's GDP. Whether the government is able to achieve its goals would depend on the quality of the programmes offered and whether they can procure sufficient funding to pay for universal education. This seems unlikely given how the government has a strained budget especially when it also has ambitions of improving the quantity and quality of its infrastructure.

The government has put in effort in the fight against corruption and made good progress. This is very important to the country's long term economic growth and development as it provides confidence to investors that their property rights are protected and the rule of law is upheld, hence providing a high level of certainty in the way which business is done. This may allow foreign aid to increase again when donors are more certain that their money is reaching the targeted beneficiaries instead of lining the pockets of corrupted officials.

The government has offered tax benefits to foreign companies who invest into the country, thereby increasing the level of investments into the tourist and agricultural industry. Attracting FDI is a much faster way to develop industries compared to government subsidies which may be smaller scale and more limited in nature but comes at the risk of losing sovereignty when foreign multinational firms (MNCs) increase their stakes in companies. There is also a risk that MNCs may exploit natural resources and labour by offering poor working conditions for workers in the hope of saving costs and the Sierra Leone government may be reluctant to enforce tight rules and regulations in fear that they may lose their investment. Nevertheless, the increase in FDI can help finance the current account deficit and develop the export market to help stem the fall in the currency.

The interventions carried out by the Sierra Leone government have positive impacts on economic growth and development. Reducing corruption and increasing the level of provision for education and health would raise the standard of living of its citizens. However, there are reservations of whether the government can finance these initiatives, especially when it has substantial foreign debts that it must find ways to repay. Attracting FDI to develop its export industries and achieve economic growth seems to be a way out, but attracting too much FDI may incur the loss of sovereignty over the long term.

Mr. Lai's notes: try your very best to back your points up with data and information from the text as much as possible. The more tailored the response, the less generic it will be.

Essay 47 (Paper 2)

Evaluate the effectiveness of the government's macroeconomic policies in achieving economic growth and economic development in Uruguay. Use information from the text/data and your knowledge of economics in your answer. (Q2g Nov 2022 SL)

Economic growth is defined as the increase in macroeconomic output indicators such as GDP and GNP whereas economic development is a more holistic assessment which reflects standards of living aspects such as education, health and level of corruption in the country.

The government has adopted a range of fiscal policies to achieve economic growth and development. The government has been spending more money in education to improve the quality of its human capital and allow workers to be more productive. The aim is to further increase income and allow its people to enjoy a higher standard of living. However, any investment in higher education is likely to benefit the higher-income families more as they are attended mostly by them, hence creating a risk that this may end up widening income inequalities in the long run unless it is more accessible for those who are in need. Income inequality has been addressed through the progressive taxation where the tax rate applied to the wealthiest section has increased to 36% from 25%. The idea is for the income to be redistributed to the poor and allow them achieve higher standards of living. However, a tax rate that is set too high may risk incentivising the most productive sections of society and in the worst case scenario, encourage them to leave for more tax friendly countries, hence leading to a decrease in tax revenue.

The additional spending to boost aggregate demand and improve the factors of production has led to a growing budget deficit. The Uruguay government is conscious that this is not sustainable in the long run and has sought to reduce the national debt by reducing borrowing and spending and raising the level of taxes. Whilst this may put the country on a more solid financial foot, this is in direct conflict with the government to achieve long term economic growth by upgrading its road networks and the construction of a new central railway. The supply side of the economy may be constrained hence limiting the long term economic development of the country.

The government is wise to curb the inefficiency of state owned enterprises (SOEs) such as railways and utility companies (fuel, water and electricity) which are likely to behave like monopolies. The government can consider privatising these enterprises and hence incentivising new management to maximise profits but cutting costs and avoiding excess wage. This should bring down prices in the long run and allow citizens to enjoy higher standards of living as they could access basic needs for survival and production on a more regular basis. This is perhaps one of the underlying reasons why the Gini coefficient has fallen substantially from 0.45 to 0.40 from 2010 to 2019. However, the government must be careful to execute the privatisation with care or else it may end up in the hands of the powerful few e.g. oligarchs and not allow the wealth benefits associated with privatisation to be shared.

The government seems to be already leveraging the efficiencies of the free market enterprise by combining the private and public healthcare sectors into one system that is overseen by the government and is eligible to receive subsidies. This structural reform probably made allocating health resources more effectively which resulted in the increase in expenditure on health care per capita to USD 1590 in 2018 and resulted in longer life expectancy (77.9 in 2019). With better healthcare, this leads to greater standards of living and levels of economic development.

In order to insulate the economy from external shocks, Uruguay aims to diversify its export markets into more high value goods such as ICT. By broadening its markets to Europe and Asia, it insures itself from the economic downturn of other countries such as Brazil and Argentina. It has also actively established trade agreements with the UE and Mercosur and eliminated tariffs except for cheese in the UE. All of these initiatives would promote export industries and allow the economy to diversify and achieve export-led growth. However, some domestic industries may face pressure from their more competitive counterparts when the tariffs are removed and the government must ensure that vulnerable industries would be able to weather the pressure if high levels of unemployment may be generated. This might be particularly worrying given that the unemployment is at a high 7.9 percent in 2019, a 2.2% increase from 2010. This has happened in the dairy sector in Jamaica and the rice industry in

Haiti which has been completely wiped out as a result of cheap subsidized imports from the US. Instead of achieving export-oriented growth, being part of a trading bloc may bring about dire consequences for the economy.

Opening up its export markets would subject the country to greater external shocks, one of which is the large fluctuations in the exchange rate of the pesos. Currently, the government is able to sooth these fluctuations by using its vast foreign reserves to support the pesos, especially when declining agricultural export revenues put downward pressure on the exchange rate. Doing so would help stabilize export markets and protect the incomes of farmers and exporters, hence leading to higher net exports and higher economic growth. However, unless the government has sufficient foreign reserves to support all the pesos in circulation at a certain exchange rate (where that is the case in Hong Kong), then this is not sustainable in the long run and depreciation will become inevitable unless other countries increase their intrinsic demand for Uruguayan goods and services. The outlook seems positive as Uruguay has a surplus in the balance of trade of USD 3400 million, a substantial increase from USD 630 million in 2010.

The macroeconomic policies adopted by the Uruguay government have largely been successful in promoting economic growth and development in the country. It will be subject to more competitive pressure as the country opens up but this is a necessary step for it to achieve export-led growth and fund the purchase of imports to raise the standard of living for its citizens. Its structural reforms involving SOEs are ambitious but will bring about great benefits if successfully executed.

Essay 48 (Paper 2)

Discuss the different barriers to economic growth and to economic development faced by Tanzania. Use information from the text/data and your knowledge of economics in your answer. (Q1g Nov 2022 HL)

Economic growth is defined as the increase in macroeconomic output indicators such as GDP and GNP whereas economic development is a more holistic assessment which reflects standards of living aspects such as education, health and level of corruption in the country.

Tanzania suffers from a number of challenging economic barriers to growth and development. Human capital in the country is generally of poor quality and the prospects of developing them is rather grim. For example, whilst there is improvement in health services, it is not keeping up with the rate of population meaning that ill people are not able to get the medical attention they need, hence affecting their ability to be productive workers. Many young people are not completing secondary education which may mean that the availability of education is not an issue compared to the motivation of undertaking schooling or the opportunity cost of education (as they could work and earn money) is simply too high. This has been exacerbated by the fact that the dire lack of employment opportunities for the youths have forced them to migrate to the cities and seek employment in the informal sector where working conditions are poor and wages are low. Furthermore, the government is not able to regulate the sector and collect tax revenue from it to fund fiscal initiatives.

One of the social barriers that is taking place are the significant income inequalities (an economic barrier) takes place between urban and rural areas. The underlying reason for this is because most of the growth has been concentrated in urban manufacturing but the wealth has not been able to be shared with rural areas. The agricultural sector which employs most people is unproductive and makes use of primarily unskilled labour. Over 70% of the country's population live there and they grow crops for subsistence motivations and do not grow tradable crops. This implies that the majority of the population is being left behind whilst only a minority are gaining higher standards of living, hence explaining the increase in the Gini coefficient from 0.38 to 0.41 in the intermediate 10 years. The stark differences seem here

to stay given that only 16% of the rural population have electricity (65% in urban areas) and government spending on education (an important factor in breaking the poverty track) has been lowered to 3.5% of GDP.

A weak institutional framework such as a poor legal system with poor law enforcement is a political factor that is a barrier to economic growth. At the heart of the market economy is the notion of property rights. Producers are able to sell their products at a certain price in exchange of money because they own the goods or service and the associated factors of production in the first place. Firms are willing to invest in a country because they know that their investments belong to them and the state will acknowledge their ownership over them. Property rights in rural areas are currently absent in the rural areas of Tanzania, meaning that aspiring entrepreneurs will not be willing to invest in those areas because they do not know the extent to which their property is being protected. Although the government is in the process of establishing property rights, it may take a while for potential entrants to feel confident that their interests are protected and also for those rights to be adequately enforced.

Lack of proper infrastructure is a significant economic barrier to growth and development. It is good to see that Tanzania and Uganda are planning to build a major pipeline between the two countries. This will attract FDI and generate jobs and raise the incomes of workers. With a politically stable government, corruption should be relatively low and hence allow money to enter the pockets of workers and their families. However, this project will likely cause ecological damage and generate wastes that will impact the environment. Such externalities may lead to a lower standard of living, hence negatively affecting economic development and reversing the upward trend in HDI even though greater growth has been achieved.

Overhanging the Tanzanian economy is the growing indebtedness from borrowing foreign loans denominated in USD. This is a significant barrier to growth, devastating even because the falling value of the shilling against the USD would mean the shilling's ability to store value is diminishing. If not addressed, this could put the country in default and lead to capital flight. The only other avenue is to issue domestic debt, which they have done but this has applied

upward pressure on interest rates which has crowded out some of the positive fiscal impact but has helped keep inflation under control.

The barriers to growth and development are largely economic in nature and the fact there are so many of them presents a very difficult situation for the country to address. The quality of human capital seems to be stagnant and there are no signs of the citizens becoming more productive through education. This is problematic as the country's other indicators such as income inequality is only worsening meaning that it is likely that the situation will continue to deteriorate rather than improve over time.

Essay 49 (Paper 2)

Discuss the impact of the proposed IMP conditions (Text F, paragraph 1) on Lebanon's economic growth and economic development. Use information from the text/data and your knowledge of economics in your answer. (Q2g Nov 2022 HL)

Economic growth is defined as the increase in macroeconomic output indicators such as GDP and GNP whereas economic development is a more holistic assessment which reflects standards of living aspects such as education, health and level of corruption in the country. The IMF proposed conditions have good intentions to generate growth and development but are not without its problems if not executed with care.

The promotion of good governance through the establishment of good processes and processes, including the enforcement of anti-corruption of the economy has good intentions but there are underlying potential issues that must be addressed for it to be successful. Lebanon currently has a corruption index of 149 which means that the corruption problem in the country is systemic (as opposed to small-scale). With corruption entrenched into the system, it is very difficult to address the problem quickly in a way which will disrupt underlying power structures. For example, the mismanagement of state run electricity and telecommunication sectors is likely to be a result of some degree of corruption (and bureaucracy) but with the problem being systemic in nature, ridding corrupt personnel may disrupt the provision of these services and worse, it will be only a matter of time when a new breed of corrupt officials take the place of their predecessors. Furthermore, it must be noted that any new procedures and processes of governance would increase oversight and accountability, thereby undercutting the power of the current government. Hence, there is a risk that the current government may lay out procedures and processes to pacify the demands of the IMF, only to implement them at face value. However, should the reforms successfully take place, it will attract foreign investors to invest in the country and hence allow great economic growth to take place.

Therefore, the way to build confidence in the banking system is to establish good processes, guarded by the rule of law and law enforcement agencies. Laws to control capital flight as

requested by the IMF are problematic. One of the most important factors underpinning a strong financial system is the absence of any barriers to entry and exit to its capital. Once capital controls are put into place, this would raise concerns to investors whether their assets are in danger of being confiscated. This is especially the case when there is a history of misuse of funds by the government, resulting in one of the highest foreign debts globally. Currently, income sent abroad amounts to USD 4.1 billion and this may worsen as its citizens withdraw funds for a safer haven.

Facing significant problems, the IMF also proposed to reduce government spending and increase higher taxes for high-income earners. This will help correct the budget deficit by targeting the financially most able. With a more balanced budget, it will allow debt servicing to be easier which hopefully will attract investment as the country's credit rating improves. Economic growth will be achieved over time. Whilst this has good intentions, taxing the wealthy disincentives them from being more productive and may result in them leaving the country in the worst case scenario and leading to lower level of revenue. This is especially the case when 10% of income earners own 70% of the personal wealth in Lebanon. The wealthiest will also be likely to be part of the governing elite and whether they would be able to support reforms that would harm their interest would be doubted. With regards to cutting spending, government funds are currently being spent on necessities such as wheat, medicine and fuel and cutting spending on its subsidies will result in lower standards of living. Austerity measures will also prevent the government from funding critical infrastructure such as roads and sewerage systems meaning that its citizens will continue in poor conditions.

Partially privatizing the electricity and communication sectors will incentivise new management to maximise profits but cutting costs and avoiding excess waste. This should bring down prices in the long run and allow citizens to enjoy higher standards of living as they could access such basic needs for survival and production on a more regular basis. This is especially important when the level of relative poverty has doubled to 45% of the population. However, the government must be careful to execute the privatisation with care or else it may end up in the hands of the powerful few e.g. oligarchs and not allow the wealth benefits

associated with privatisation to be shared. This is particularly worrying when the country has a corruption index ranking of 149, a substantial deterioration from 123 in 2015.

Transitioning from a managed to a floating rate exchange rate system will subject the Lebanese pound to large fluctuations in market value. The government does not seem to have substantial reserves to support the currency in times of need meaning that if significant depreciation occurs, it would not have the resources to support the value of the currency. Given that the Lebanese pound is already facing downward pressure, it is likely to fall even further once it becomes a freely floating system. Value of exports is not likely to increase (demand for exports is price inelastic) as it only has a small manufacturing industry and the country has limited resources which means that producers are going to effectively have less income, hence leading to lower standards of living. Also, the weaker Lebanese pound is just going to exacerbate the cost push inflation in the country which relies heavily on imports.

From the reasons above, Lebanon has to pay a heavy cost to meet the IMF conditions for funding. Many of these reforms have good intentions but are difficult to execute. It is no wonder the country has resisted seeking help from the IMF in the past.

PAPER 3 10-MARK QUESTIONS (THE GLOBAL ECONOMY)

Essay 50 (Paper 3)

Recommend a policy which could be introduced by the government of Country X in response to the expected fall in the world price of coffee. Use the data provided and your knowledge of economics in your answer. (Q1b Official IB Specimen Paper HL)

The government of country X could consider providing subsidies for the domestic coffee industry. By providing a per unit subsidy, the effective price which producers receive will increase allowing them to mitigate the impact in the expected fall in the world price of coffee. However, this may only be a short-term solution considering that government funds to support the subsidy is limited and coffee prices are probably going to decrease further with other coffee-producing countries looking to increase output. Country's X coffee is going to be subject to tariffs as political changes abroad will bring about trade protection. It is also not helpful that other countries will provide export subsidies, resulting in a zero-sum situation where there are no gains to be made.

Hence, the subsidy provided by country X should not be quantity based where farmers are compensated on a per unit basis to allow them to better compete on price. Rather, it should be quality based where the subsidies could be in the form of technological support or know-how for farmers to be able to produce better quality coffee. By differentiating themselves with better quality coffee, coffee producers from country X can insulate better against price fluctuations and less adversely affected by trade protection measures adopted by other countries as the price-elasticity of demand of these higher quality coffee exports will be more inelastic. Furthermore, domestic consumers may be more inclined to buy domestic coffee (as opposed to imports) hence improving the current account deficit which is at USD 2.35 billion current. However, given that 40% of the population works in the agricultural industry, financing the subsidy would be expensive and it will take time for the quality of coffee to be improved given that it is a primary product and time is needed for growth. Hence, production subsidies may need to be complemented by other trade barriers such as tariffs to allow

domestic industries time and space to adopt more productive technology and raise money through tariffs to fund the subsidies.

Mr Lai's notes: there is no need for an introductory or concluding paragraph that you would do in a Paper 1 10-mark question. An evaluation of a suggested policy is sufficient.

Essay 51 (Paper 3)

Recommend a policy which the New Zealand government could introduce to address the over-consumption of sugary drinks. Use the data provided and your knowledge of economics in your answer. (Q2b Official IB Specimen Paper HL)

The New Zealand government could charge an indirect tax on products with high sugar content. Imposing an indirect tax would raise the cost of production and producers would produce less at each and every price level. The price would increase and consumers will find it more expensive to consume and they will demand less sugary goods as a result. An indirect tax is effective in that it is easy to implement and does not require the government to allocate a budget to implement it (as opposed to education when expenditure is required).

However, sugary drinks may be demand inelastic for two reasons. First, sugary drinks could be regarded as addictive where people allude to being attracted to a “sugar rush” and may still consume it despite the higher prices. Sales may go down in the short run but increase again after people get used to the prices. Second, sugary drinks such as soft drinks form a small proportion of a person’s income. Even if prices did increase, it would still be very affordable to most people. This is particularly the case where the demographic that is most in need to cut back on sugary drinks are the older age groups, where they have the highest rates of diabetes but are likely to have the highest incomes. Note that the tax is only sugary drinks and not on other sugary products such as sweets and chocolates. Given how prevalent sugar is, it may not be particularly feasible to tax all products with high sugar content

On the other hand, the government is likely going to be able to raise substantial government revenue from the indirect tax, allowing them to fund other policy initiatives such as health education and advertising. Note that the prevalence of diabetic cases is different amongst different ethnic groups e.g. it is much more prevalent amongst Pacific peoples than Europeans & others. Indirect taxes cannot be as discriminating in its approach compared to education and advertisements who can be much more targeted in its solution.

Mr. Lai’s notes: as mentioned in the guide, keeping the word count to 340 words is sufficient to score full points in this answer.

Essay 52 (Paper 3)

Recommend a policy which could be introduced by the government of Burundi to reduce income inequality in Burundi. Use the data provided and your knowledge of economics in your answer. (Q1b May 2022 HL)

One policy which Burundi could implement are progressive taxes- where higher tax rate applies for people from higher income groups. The high Gini coefficient of 0.39 implies that such capacity exists.

Progressive taxes can work by redistributing wealth from the rich to the poor. From collecting more tax from the healthy, money could be spent by the government to reinvest in public goods such as health and education, thereby raising the productivity of the poor and allowing the income gap to be reduced. The data implies that this is especially so for females where the female: male ratio with some secondary education is 0.68. Only 18.2% of science and engineering graduates are female implying that very few of them work in high value occupations and only 6.7% of females over 18 have bank accounts which implies the lack of financial sophistication and financing channels. However, whether the human capital could be improved through redistribution would depend on the effectiveness of the training provided, let alone that it takes time for any positive effects to take place meaning that income inequality will be present in the short run. Furthermore, increasing female participation in education is possibly a deep rooted cultural problem where the expectation is for women to play a predominantly domestic role. Hence, simply providing more education that is funded by progressive taxes may be ineffective in addressing this problem.

Progressive taxes served to finance the redistribution of income benefits via social welfare for the poor can improve income inequality relatively quickly as the wealth redistribution is immediate and direct. With more money, the poor can buy more basic necessities and enjoy a higher standard of living. However, this may be an unsustainable solution in the long term as it may breed laziness and unwillingness to further themselves by gaining employment as their opportunity cost of not working has been reduced. Furthermore, it may disincentive the higher income population as they find much of their income has been taxed away and may

choose to relocate to another country with lower tax rates in the most extreme case. This would be a lose-lose situation where tax revenue from its most productive population would be lost.

Essay 53 (Paper 3)

Recommend a policy which could be introduced by the government of India in order to address the problem of traffic congestion in New Delhi. Use the data provided and your knowledge of economics in your answer. (10 marks) (Q2b May 2022 HL)

One policy would be for the government to invest in public transport networks such that it would serve as a viable alternative to driving. Rational consumer choice would imply that drivers do not enjoy being stuck in congestion but the reason why they do so is because there is no other alternative. Although the roads are congested, taking public transport is probably even slower or the experience is so bad e.g. unsafe that the optimal choice is still to drive. This could be seen by the 200% increase in vehicle registration even though road networks have increased by 34% implying a worsening congested problem.

A good quality, reliable and efficient public transport network would provide a viable alternative to driving and Indian consumers should be very willing to switch their mode of transportation to public transport such as railway and public buses. Note that most drivers probably have higher levels of income (as they own a car) and hence the public transport provided can set prices at a relatively high level, hence allowing the government and investors to recuperate the costs much quickly. However, investing in a high-quality public transport network requires substantial upfront capital which may impose substantial financial pressure for a developing country like India. Furthermore, large scale construction can take decades to build meaning that the congestion problem that is in dire need of addressing cannot be solved in the short run.

Perhaps the investment in infrastructure can be combined with regulations such as a ban on certain key road networks by private vehicles during rush hour and is only to be used by public buses. By prioritising investment efforts on providing high quality bus service, Indian workers will willingly switch to use public buses hence addressing congestion problem in key locations relatively quickly whilst the entire network is being built out.

Mr. Lai's notes: although the question asked for one policy, I have also discussed the use of regulations as enhancing the effectiveness of the chosen policy (investing in public transport).

Essay 54 (Paper 3)

Recommend a policy that may be implemented to reduce the contribution of emissions the aviation industry makes to global warming. Use the data provided and your knowledge of economics in your answer. (10 marks) (Q1b Nov 2022)

One of the policies that can be implemented is the use of tradable permits. By allocating permits to airline companies, the negative externalities associated with aviation e.g. air pollution can be internalised. The advantage of tradable permits is that it is a market-based solution and each aviation company has the flexibility of determining the optimum number of permits they need to meet their emission needs. This is especially important as the energy source for airplanes are not easily substitutable and mandating the use of renewable energy sources is simply not practical.

Inefficient companies are incentivised to adopt environmentally more friendly technology to refrain from buying more permits. For those that could not do so, they have the option of buying permits from efficient firms that do not need so many permits. Even efficient firms which are producing at levels below their quota are motivated to reduce pollution so that they sell extra permits to earn extra revenue. All parties are now motivated to reduce emissions and there should be a lot of scope to do so since the aviation sector accounts for 4.9% of human made global warming and companies may have been wasteful due to the subsidies on offer.

However, a successful tradable permits scheme depends on all countries in a large geographical area e.g. Europe to join for it to be successful. This may deter countries with less efficient aviation companies from joining as it will increase their cost of operation, rendering the implementation of the programme to be politically very challenging. A more viable alternative might be to encourage the use of rail travel as the CO₂ emission is nearly half that of air travel (0.085 kg/km vs. 0.156 kg/km)

Essay 55 (Paper 3)

Recommend a policy that the government of Turkey could introduce to reduce income inequality. Use the data provided and your knowledge of economics in your answer. (10 marks) (Q2b Nov 2022)

Turkey can increase its expenditure on education, allowing workers to be more productive, earn higher levels of income and hopefully gain higher standards of living. There is a lot of scope to improve the scale of education services as the country only spends the equivalent of 2.9% of its GDP on education which is very low considering the average for low human development countries is 3.6%. Turkey's high Gini coefficient of 40 and low HDI ranking of 62 suggests that many of its people are stuck in the poverty trap. The poor are so poor that they cannot afford to send their children to school, not only because of monetary issues but because it would incur the opportunity cost for them to earn money for the family. Thus, the increased spending on education should also be accompanied with extra subsidies for families to compensate for the potential loss of income.

In order for education to be truly effective in reducing the income gap, the government could be more pragmatic and focus their attention on providing education in vocational areas that are high value and likely to raise their level of income in a relatively short period of time. This could be technological and industrial skills so that workers can work in the manufacturing industries and earn a higher level of income compared to in the farming industry. It could also be English speaking skills for people to work in the tourism industry as tour guides. This was a very effective way for villagers in Cambodia to move from rural areas and earn higher incomes in urban cities such as Phnom Penh.

Providing education on a wide scale is very costly and the government needs to seek extra sources of finance to finance this. Taxing the rich even more does not seem to be an option as the top tax bracket is already taxed at more than 40% and a higher tax rate would only disincentive the most productive segment of society to work harder. If finding additional sources of revenue is not an option, the Turkish government may need to reprioritise its budget allocations.

Mr Lai's notes: I would not recommend offering progressive taxes as a policy option as it is already being implemented already in Turkey according to the text.