



EUNOIA JUNIOR COLLEGE  
JC2 Preliminary Examination 2018  
General Certificate of Education Advanced Level  
Higher 1

---

## Economics

Paper 1 Case Studies

**8823/01**

**11 September 2018**

**3 hours**

Additional Materials: Answer Paper

---

### READ THESE INSTRUCTIONS FIRST

Write your name, civics group and question number on the work you hand in.

Write in dark blue or black pen on both sides of the paper.

**Begin your answer to each question on a fresh sheet of paper.**

Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

At the end of the examination, **fasten your answers to Question 1 and Question 2 separately.**

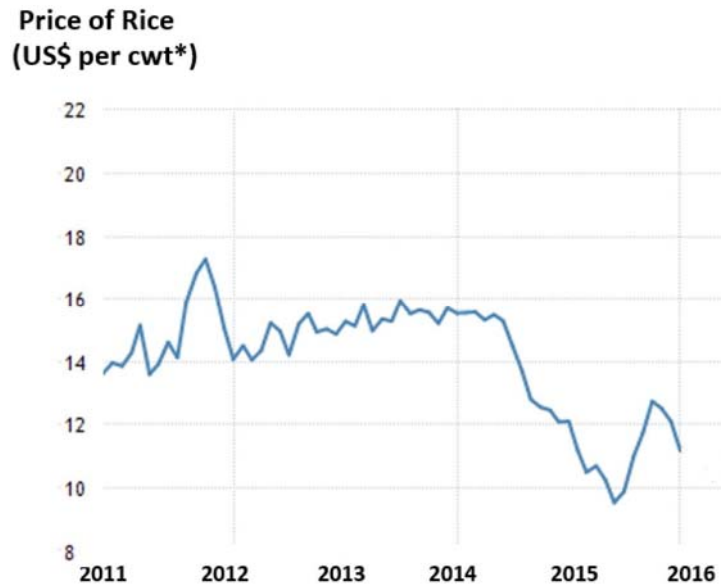
The number of marks is given in brackets [ ] at the end of each question or part question.

---

This document consists of **8** printed pages

## Question 1: Tackling Diabetes

**Figure 1: World price of rice**



\* A hundredweight, Cwt, is a unit of measurement for weight used in certain commodities

Source: [www.tradingeconomics.com](http://www.tradingeconomics.com), accessed 15.07.18

### Extract 1: Global food prices drop to a five year low

Factors that are driving the sharp decline in international food prices include cheap oil that contributed to abundant global supplies of food in 2014, as well as prospects of a bumper crop for wheat, maize and rice in 2015. The agriculture and food sector continue to benefit from cheaper chemical fertilizer, lower fuel and transportation costs brought on by the previous year's oil price declines.

Between August 2014 and May 2015, wheat prices plunged by 18%, rice prices dropped by 14% and maize prices declined by 6%. However, the arrival of El Nino, the appreciation of the U.S. dollar and the recent increase in oil prices could drive up food prices in the coming months.

Adapted from *The World Bank*, 1 July 2015

### Extract 2: Challenges of the global rice market

As rice is one of the staple grains for a large number of the world's population and to ensure food security, reduce poverty and help traditional farmers adapt to the effects of climate changes, profitable rice cultures must survive on less land, with less water and with less labour. Thus, the rice production system must be more efficient, environmental-friendly and more equitable.

Rice yield per stalk of plant has fallen as a result of the decline in investments made in productivity research since the early 1990s. On the other hand, the areas used for rice cultivation in some of the biggest rice producing countries in the world have been decreasing greatly because the land was re-purposed for other needs, such as urban expansion as well as biofuel production. Also, water resources have become scarcer, and water is vital for traditional rice cultivation methods. In addition, labour hands are more difficult to find because young farmers are more interested in finding jobs in other industry sectors that are better paid.

The challenges that the rice industry has to face are complex, and involve the creation of sustainable strategies that will primarily enable the production needed to cater to the growing demand for rice due to rapid population growth, especially in the areas where traditional cultivation technologies are

intensively used. Such strategies should also ensure profitable productions to keep rice prices at an affordable level for a growing consumer market.

Adapted from *AgronoMag*, 2 October 2017

### **Extract 3: Curbing diabetes in Indonesia**

Diabetes, along with other non-communicable diseases (NCDs), is the leading cause of death in Southeast Asia. As a developing country, Indonesia is facing a double burden of diseases. In 2014, approximately 71 percent of deaths were attributed to NCDs and 6 percent of the total were due to diabetes. Yet, most of the population is still not aware of the urgency of combatting this disease.

There are 2 key reasons for the lack of urgency. Firstly, people still strongly believe that diabetes is a genetic disease; hence, they embrace the diagnosis as part of inevitable heritage from their ancestors. Secondly, it is because we live in what public health experts call an obesogenic environment — an environment that promotes gaining weight and one that is not conducive to weight loss. Jakarta is a perfect example. We have all gone through the phase of making life goals to work out more and eat healthily. But many of us have failed. Staying outdoors is out of the question due to severe pollution, and sidewalks are crowded with vendors and using private vehicle is much more comfortable than sharing public transportation. These aspects beyond our personal choice that directly — or indirectly — affect our population's health are called social determinants of health.

In response to the growing problem of obesity and diabetes, the government said that it will be making efforts to reduce dependency on rice by promoting other sources of carbohydrates. Although Indonesia is the world's third-largest rice producer, the country usually needs to import rice from Vietnam or Thailand to maintain stable prices and meet a huge rice demand at home. "This food diversification program is part of our effort to reduce people's dependency on rice," said Agung Hendriadi, head of the Agriculture Ministry's Food Sovereignty Agency. Among the alternative local foods promoted by the government are yam, arrowroot, cassava, corn and sago. According to data by the Agricultural Ministry, Indonesia's rice consumption per capita is estimated at 124 kilograms this year, which is considerably higher than Malaysia (80 kg), Thailand (70 kg), Japan (50 kg) and South Korea (40 kg).

Adapted from *Indonesia Expat*, 26 October 2017

### **Extract 4: Mexico's sugar tax**

Mexico has high rates of obesity — more than 70% of the population is overweight or obese — and sugar consumption. More than 70% of the added sugar in the diet comes from sugar-sweetened drinks. Coca-Cola is particularly popular and holds a place in the national culture.

Mexico's sugar tax appears to be having a significant impact for the second year running in changing the habits of a nation famous for its love of Coca-Cola, and will encourage countries troubled by obesity and contemplating a tax of their own.

An analysis of sugary-drink purchases, carried out by academics in Mexico and the United States, has found that the 5.5% drop in the first year after the tax was introduced was followed by a 9.7% decline in the second year, averaging 7.6% over the two-year period. The tax, which is just 1 peso (4p) per litre of sugary drink, had its biggest impact on the poorest households, where the decline in purchases was 18.8ml per person per day in 2014 and 29.3ml in 2015.

Health experts worldwide have been watching the progress of the Mexican tax closely because it could potentially lower the rates of obesity-related diseases and type 2 diabetes in a country with a population of more than 122 million. The Euromonitor International suggested that the Mexican tax may be too low to have the desired effect and that a higher tax introduced in Berkeley, California, has been a bigger success.

The taxes are a headache for US drinks manufacturers such as Coca-Cola and Pepsi that are struggling to diversify their businesses into healthier foods and drinks as they face declining

consumption of their core products. The US beverage industry has lobbied heavily against the taxes, saying it would hurt jobs and that sugar taxes do not work.

Adapted from *The Guardian*, 22 February 2017

### Questions

- (a) (i) With reference to Figure 1, summarise how the world price of rice changed from 2011 to 2016. [2]
- (ii) Using a demand and supply diagram, explain **two** possible reasons for your observation. [4]
- (b) Extract 2 states that there was a re-purposing of land. Identify the choices available and the opportunity cost of such a decision. [2]
- (c) Explain how a rise in the productivity levels of rice farming may affect resource allocation in the market for biofuels. [4]
- (d) (i) With reference to Extract 3 and using an appropriate diagram, explain why the market for rice fails. [5]
- (ii) Explain how the Indonesian government's food diversification programme mentioned in Extract 3 may impact the economy, and comment on the likely impact on its standard of living. [7]
- (e) Analyse how Mexico's sugar tax would harm the US drinks manufacturers and employees, and discuss briefly whether it is inevitable that the US drinks manufacturers will be adversely affected. [9]
- (f) Using evidence from the case study and/or your own knowledge, discuss whether the best course for Indonesia is to follow Mexico's policy of taxation in its push to discourage Indonesians from consuming rice. [12]

[Total: 45]

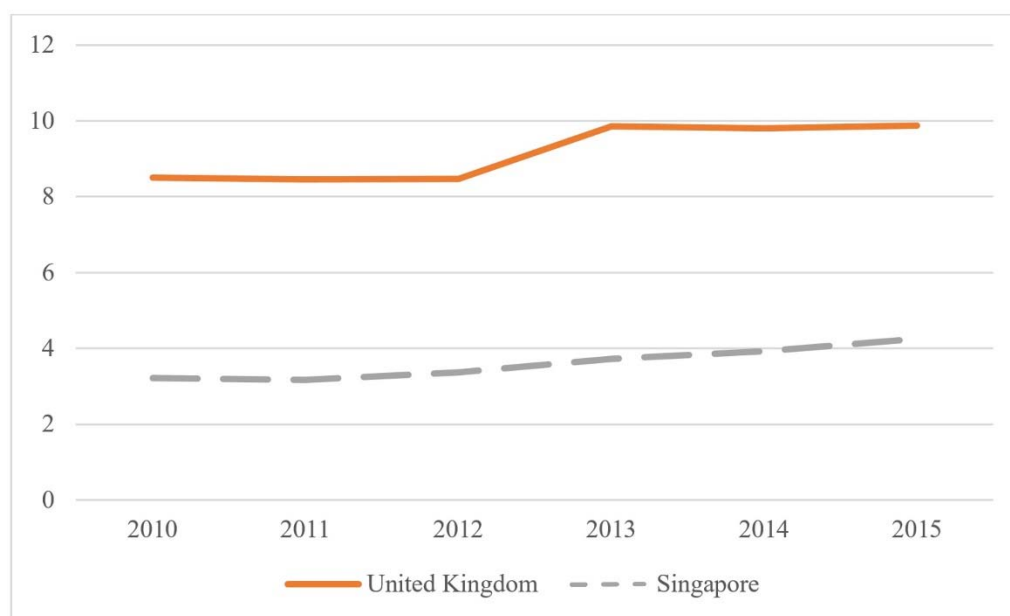
## Question 2: Taking Care of the Young and Aged

**Figure 2: Life Expectancy of Singapore and UK (in years)**

	2010	2011	2012	2013	2014	2015	2016
Singapore	81.5	81.9	82.1	82.4	82.6	82.9	83.0
UK	80.4	80.9	80.9	81.0	81.3	81.0	81.0

Source: *Singstat* and *World Bank*, accessed 20.07.18

**Figure 3: Healthcare expenditure (as % of GDP)**



Source: *World Bank*, accessed 12.07.18

**Table 1: UK nominal interest rate and inflation rate**

	2012	2013	2014	2015	2016
Nominal interest rate (%)	0.5	0.5	0.5	0.5	0.5
Inflation rate (%)	3.5	3.0	1.9	0.0	0.3

Source: *www.tradingeconomics.com*, accessed 20.07.18

### Extract 5: Young people's debt

Young people are building up debt and worrying about money in their first few years of adult life, but far too few are seeking advice when they fall behind. The report reveals that 18- to 24-year-olds are building up significant debts at a relatively early age and suffering widespread money worries, despite most trying to budget and actively manage their personal finances. It found that 37% are already in debt, owing an average of just under £3,000 which excludes any student loans or mortgages. Over half of adults under 25 report that they regularly worry about money, with 21% admitting they lose sleep as a result. There is now more reason to

worry about ballooning debts given that inflationary pressures have eased in recent years, to bring real interest rates back to positive figures.

Adapted from *The Guardian*, 30 August 2016

### **Extract 6: Successful aging in Singapore**

The Singapore government launched Active Aging, a collection of measures put together to enhance the quality of life of the elderly. These measures include extension of re-employment age to 67 years old, so that elderly can be gainfully employed and continue to contribute to the economy. In addition, the government also announced the Silver Support Scheme which supplements the income of the bottom 20-30% of Singaporean workers aged 65 and above. This will enhance the purchasing power of these elderly. Not to forget, there will be a series of improvement made to existing infrastructures to encompass senior-friendly features, including traffic lights with the ability to extend crossing duration for seniors.

Adapted from *Ministry of Health, Successful Aging Action Plan*, 2016

### **Extract 7: Aging Britain**

The UK's aging population has triggered concerns over how the country will cope in the future, with greater demands on healthcare and pensions. This is because of the large number of people who were born in the 1960s – who are due to retire in the next 20 years. By 2039, the number of people aged 75 and over is projected to rise to 9.9 million. More than two-fifths of national health spending in the UK is devoted to people over 65. The data shows that an 85-year-old man costs the National Health Service (NHS) about seven times more on average than a man in his late 30s. Health spending per person steeply increases after the age of 50, with people aged 85 and over costing the NHS an average of £7,000 a year.

Adapted from *The Guardian*, 1 February 2016

### **Extract 8: Tackling youth unemployment in the UK**

There has been good economic news on a number of fronts for the UK. GDP growth has held up well in the third quarter, despite the uncertainty created by the vote for Brexit. Services and consumer spending have underpinned the resilience of the UK economy and the retail spending growth remained strong this month. These positive economic developments will be particularly helpful to younger workers. Just five years ago, the number of unemployed under 25 years old in the UK was over a million, and the figure has since dropped to around 625,000. But despite this progress, 16-24 year-olds still make up nearly 40% of the UK's unemployment total. If Britain could reduce the number of unemployed youths or NEETs ("Not in Employment, Education or Training") to match Germany's rate of 10.1%, it would add 2.3% to GDP, worth £45 billion.

In other words, young people are three times more likely to be unemployed than the rest of the working population. This is not a new issue, nor one confined to the UK. Finding a first job and starting a career has always been a difficult process. Young people may have good qualifications, but they do not have the same track record and life skills as older people with years or decades of experience behind them. Youth unemployment is a big problem throughout the Western world. Two policy messages stand out from the research.

First, vocational education and training is of critical importance – a system where young workers benefit from classroom teaching to raise their skill levels while they are in the early

phase of their careers. This approach works particularly well in Germany, and the UK has a long tradition of apprenticeships. The UK government is committed to ensuring 3 million new apprenticeships between 2015 and 2020 and the broader objective is to put vocational training and apprenticeships on a par with graduate qualifications. UK education and training became too heavily skewed towards university qualifications and new apprenticeships are now rebalancing the system towards work-based training.

A second policy theme is to make sure that employers are engaged with young people and schools, so there is more familiarity with the world of work throughout the education system. This can include work experience, career advice, mentoring and community youth initiatives supported by business. In the early stages of their education, young people need to see the positive opportunities available in the business world – particularly in the dynamic areas linked to new technologies.

As for the causes of youth unemployment, there are views that older workers are displacing young workers. However, this is not supported by the research. Economies which offer good opportunities to workers over 60 generally also perform well in terms of employment training opportunities for young people. These economies tend to have more flexible labour markets and a culture of training and development at all age levels.

Nor can we blame high immigration for youth unemployment, here in the UK or elsewhere. Countries such as Germany, US, Canada and Nordic Countries, have also experienced high immigration. Immigration creates economic growth and employment which can benefit younger workers. The key issue is to make sure they are equipped to meet the challenge.

Adapted from *The Telegraph*, 26 October 2016

## Questions

- (a) Summarise the trends in life expectancy and healthcare expenditure between Singapore and the UK from 2010 to 2015. [2]
- (b) (i) What evidence is there in the data that real interest rates were negative in the UK? [2]
- (ii) Explain the effects of negative real interest rates in the UK on the debts of its youths. [2]
- (c) Using the concept of production possibility curve, explain how raising re-employment age in Singapore allows the overcoming of its constraints, and comment on whether this measure will be appropriate. [7]
- (d) (i) Identify and explain **two** possible relationships between fiscal position, transfer payment and inclusive growth. [4]
- (ii) Explain how rising youth unemployment and aging population may affect a government's ability to achieve the objective of inclusive growth. [5]
- (e) Explain the following statement using economic analysis:  
 "Immigration creates economic growth and employment which can benefit younger workers." (Extract 8) [4]
- (f) "As for the causes of youth unemployment, there are views that older workers are displacing young workers" (Extract 8). Discuss the validity of this statement. [8]
- (g) Using information provided and/or your own knowledge, assess the effectiveness of the policies in addressing youth unemployment in the UK. [11]

[Total: 45]



**2018 JC2 H1 Economics Preliminary Examination Economics Paper 1**  
**Suggested Answers, Mark Schemes**

**Case Study Qn 1**

- (a) (i) **With reference to Figure 1, summarise how the world price of rice changed from 2011 to 2016.** [2]

The world price of rice generally fell [1] over the period. However, it showed a (less significant) rise from 2011 to 2014 [1].

- (ii) **Using a demand and supply diagram, explain two possible reasons for your observation.** [4]

One supply factor [1]:

- From Extract 1, there were decreasing costs of production for inputs in rice production like chemical fertilisers, fuel and transport due to the decreasing price of oil which was used to produce these inputs.

OR

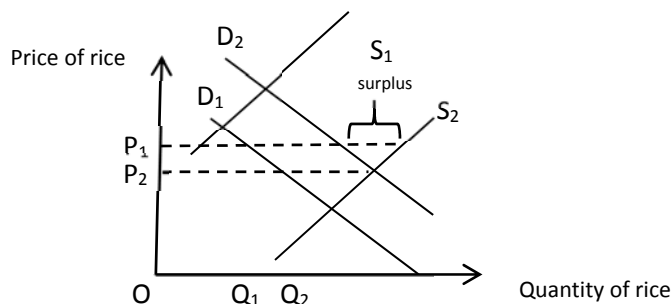
- There was good harvest for rice in 2015

Hence, the supply of rice increased significantly from 2015, causing the price of rice to fall sharply.

One demand factor [1]:

- From Extract 2, the demand for rice rose due to rapid population growth

Rise in ss > rise in dd → surplus → P falls [1] as shown in the diagram [1] below:



Acceptable answers include:

- the use of Extract 2 for supply falling (challenges faced by rice producers) and the increased demand from the population growth → shortage to explain the rise in price of rice for 2011-2014.
- The use of PED concept to explain the sharp fall in price of rice

Answer should not provide only 2 supply factors to explain the shortage/surplus.

- (b) **Extract 2 states that there was a re-purposing of land. Identify the choices available and the opportunity cost of such a decision.** [2]

Choices are the urban expansion to grow the city and the land to be used to grow crops for biofuel production. [1] For opportunity cost, the benefits of the next best alternative sacrificed (eg. TR to producer) due to loss of rice output [1] must be specified.

- (c) **Explain how a rise in the productivity levels of rice farming may affect resource allocation in the market for biofuels.** [4]

Rise in productivity means that with the same amount of inputs there will be higher output of rice. The supply of rice increases [1] causing the price of rice to fall [1], *ceteris paribus* i.e. no change in demand.

Rice farmers will face falling revenue since the demand for rice is likely to be price-inelastic (necessity) [1].

They will switch to growing other crops (competitive supply) which will provide higher revenue, for example, crops like corn for biofuels. Hence, more resources will move from rice production to the production of other crops for biofuels.[1]

Alternative answers are acceptable:

- As a result of the increased productivity in rice farming, the economy's production-possibility curve (PPC) shifts outwards. This meant it is now possible to increase rice production whilst more factor resources can be released into increased production of biofuels as well.
- Rice is also an input for biofuels. The fall in the price of rice will therefore mean a lower cost of production for biofuels using rice inputs. The demand for other crops for biofuels, e.g. corn, will face a fall in demand. Resources will be reallocated from the production of other crops into even higher rice production which is now more profitable for the biofuel producers.

- (d) (i) **With reference to Extract 3 and using an appropriate diagram, explain why the market for rice fails.** [5]

According to Extract 3, the market for rice fails due to information failure (over-estimation of private benefit of consumption). Indonesians may underestimate the private costs of consuming rice as they are not be fully informed of the health risks of consuming rice such as developing diabetes. Extract 3 highlights that Indonesians generally think that diabetes is hereditary, rather than linked to dietary factors. [1] As a result, they underestimate the private costs of consuming rice. Because they do not fully appreciate the harmful effects (information failure) of rice, they will tend to over-demand rice ( $D_{\text{perceived}} > D_{\text{actual}}$ ). [1]

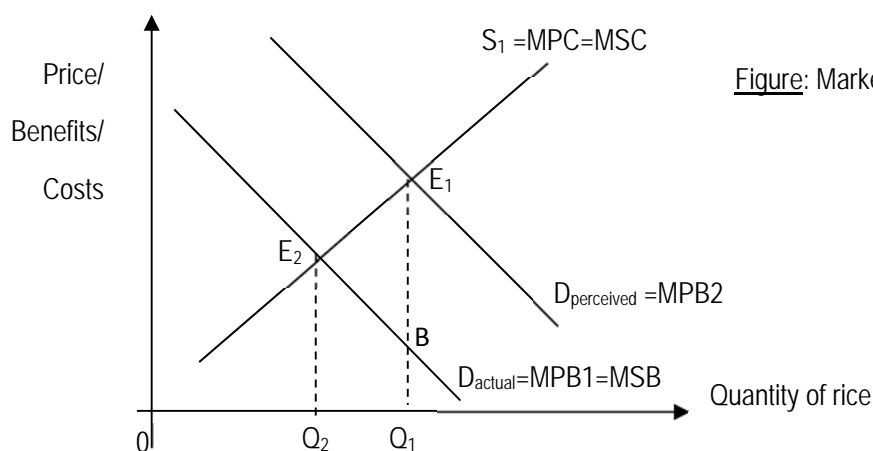


Figure: Market for rice [1]

If the consumers are aware of the true harm of consuming rice on themselves, the 'correct' level of demand, they would consume  $OQ_2$ , the socially efficient quantity of the good where  $MSB = MSC$ . However, due to the lack of information about how 'bad'

rice is, it results in individuals 'over-valuing' the product. Demand registered for rice is at a higher level of  $D_{\text{perceived}}$  in the market. This leads to a level of production and consumption of  $OQ_1$  that is above the socially efficient output level,  $OQ_2$ . [1] The overconsumption of rice by  $Q_2Q_1$  incur a deadweight loss of  $E_1E_2B$  on society as the cost of consuming  $Q_1Q_2$  amount ( $E_1Q_1Q_2E_2$ ) exceeds the benefit that society enjoys ( $BQ_1Q_2E_2$ ) [1]. The market has therefore failed to allocate resources efficiently such that society's welfare is not maximised.

[Market failure analysis based on rice as a demerit good is also accepted.]

- (ii) **Explain how the Indonesian government's food diversification programme mentioned in Extract 3 may impact the economy, and comment on the likely impact on its standard of living.** [7]

Diversification program is about persuading citizens to switch from consuming rice to other local food [1] → fall in DD for imported rice → rise in DD for local food alternatives which are substitutes for imported rice[1].

Many Indonesian households spend more on local food alternatives → Rise in Cd → Rise in AD → assuming that Indonesian economy is operating near full employment level of output → multiplied rise in real national income, rise in GPL. [1]. Firms hire more factors of production to produce more goods → higher employment of labour. [1]

**Comment [up to 3m]**

- Rise in real national income → increase in households' purchasing power → material SOL improves.
- Greater domestic production of alternative foodstuff → environmental pollution → Indonesians may develop health problems such as breathing issues → non-material SOL may worsen
- Employment rises → greater job security, less stress → non-material SOL might improve
- The decreased rice consumption will lower the risks of diseases like diabetes and the material (fewer sick days and higher incomes) and non-material (lower healthcare costs) standards of living will increase.

Take a stand: Overall SOL is likely to improve assuming environmental pollution is not significant. [Alternative stand is also acceptable.]

- (e) **Analyse how Mexico's sugar tax would harm US drinks manufacturers and employees, and discuss briefly whether it is inevitable that US drinks manufacturers will be adversely affected.** [9]

<b>Content</b>	Impact of a tax on firms' revenue and on jobs
<b>Context</b>	Consequences of a tax on firms and employees
<b>Command</b>	Assess + Discuss

'Harm' → US drinks manufacturers experience a fall in total revenue; workers in the US drinks industry may lose their jobs.

Mexico government imposes a sugar tax on sweetened drinks → rise in unit cop → fall in supply of US manufactured sweetened drinks from SS1 to SS2

→ shortage at initial price → rise in equilibrium price from  $P_1$  to  $P_2$ , fall in equilibrium quantity from  $Q_1$  to  $Q_2$ .

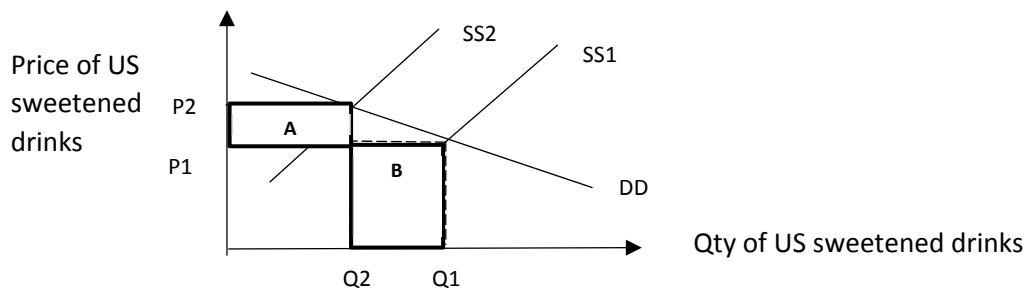
$PED > 1$  due to avail of substitutes

→ a rise in price of sweetened soft drinks will lead to a more than proportionate fall in its quantity demanded

→ total revenue gained due to a rise in price (Area A) < loss in total revenue due to a fall in quantity demanded (Area B)

→ overall, fall in total revenue earned by US drinks manufacturers.

Post-tax revenue will be even lower.



Fall in quantity demanded of sugar-sweetened drinks produced by US drinks manufacturers → Fall in demand for workers in US drinks industry → unemployment rises, wages earned by employed workers fall. Hence, the welfare of workers in the US drinks industry will be adversely affected. Extract 4 claims that the US beverage industry has lobbied heavily against the taxes, saying it would hurt jobs.

#### **Discuss briefly:**

##### **US drinks manufacturers may not be adversely affected:**

- Drinks manufacturers may diversify their businesses into healthier foods and drinks as highlighted in Extract 4
- Tax does not affect drinks manufacturers with no or little sugar content in their drinks; Such drinks manufacturers may experience a rise in TR as consumers switch from more expensive sugar-sweetened drinks to non/less sweet drinks

##### **US drinks manufacturers may be adversely affected:**

- Sales of sweetened drinks may be US drink manufacturers' core business
- Consumers may not like the taste of non/less sweet substitute drinks
- Diversification of drinks may require US drinks firms to incur higher R & D expenditure and thus costs

**Take a stand:** Whether it is inevitable that Mexico's sugar tax will adversely impact US drinks manufacturers depend on factors such as the success of the sales of its non/less sweet drinks and the ability of US drinks manufacturers to keep lower R & D costs.

	<b>Knowledge, Application/ Understanding and Analysis</b>
L2 (4-6m)	A well explained answer that explains the harmful impact of sugar tax on BOTH US drink manufacturers AND employees. Use of case study evidence is present.
L1 (1-3)	A descriptive answer that explains only the harmful impact of sugar tax on US drink manufacturers OR employees.

Discuss	Up to 3m to reach a reasoned judgement on whether it is inevitable that US drinks manufacturers and employees will be adversely affected.
---------	---

- (f) **Using evidence from the case study and/or your own knowledge, discuss whether the best course for Indonesia is to follow Mexico's policy of taxation in its push to discourage Indonesians from consuming rice.** [12]

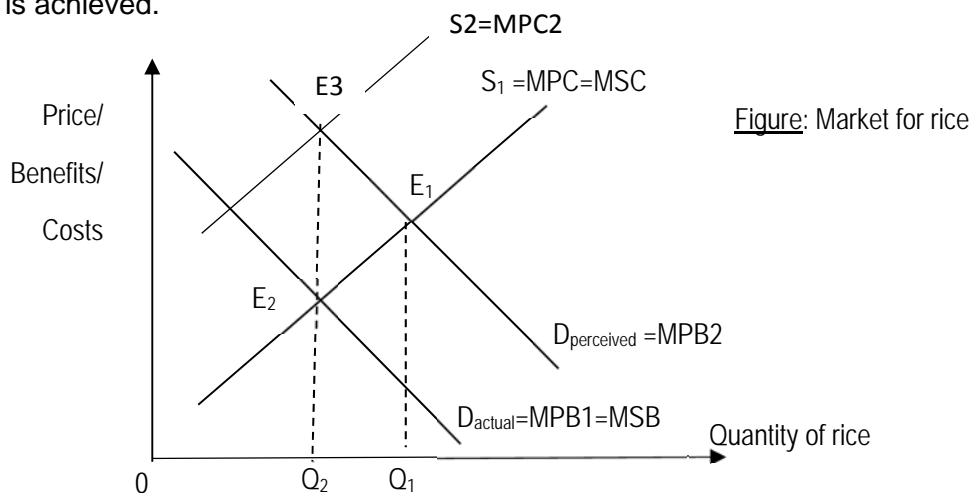
<b>Content</b>	Micro policies to address excessive consumption of rice
<b>Context</b>	Government decision-making relating to choice of policies
<b>Command</b>	Discuss

**Highlight aim of Indonesian government:** To achieve allocative efficiency and equity in the rice market → helps to curb health problems such as diabetes

**Indonesia should follow Mexico's policy of taxation:**

- (1) **Explain how indirect tax corrects allocative inefficiency in market for rice.**

Indirect tax on rice → rise in unit cost → fall in supply of rice from  $S_1$  to  $S_2$  until  $Q_2$  is achieved → deadweight loss is eliminated → allocative efficiency in the market for rice is achieved.



- (2) **Strengths of an indirect tax:**

- Effective tool at reducing rice consumption of middle or lower income groups that forms a significant proportion of population in Indonesia, as in the case of Mexico (Extract 4)
- Internalises external cost in consumption → rations out those who are unable &/or unwilling to internalise the external cost through higher price
- Flexible method that changes incentive to consume in market → affects behaviour of consumers as in case of Mexico (Extract 4)
- Source of tax revenue for Indonesian government → greater ability to provide subsidies for healthcare or other merit goods to enhance society's welfare

**Indonesia should not follow Mexico's policy of taxation:**

- (1) **Limitations of an indirect tax:**

- Government failure → overestimation of size of indirect tax → problem of over-taxation may lead to greater societal welfare loss
- Does not directly target at correcting info failure, obesogenic environment that is highlighted in Extract 3

- Demand for rice is price inelastic (i.e. rice is a necessity as indicated in Extract 3) → a tax may be ineffective as a rise in the price of rice leads to a less than proportionate fall in quantity demanded of rice.
- Higher prices of rice → less affordable → worsens problem of inequity

## (2) Recommend alternative policy:

Root cause of problem seems to be information failure as highlighted in Extract 3 → Government should carry out educational campaigns that targets at correcting imperfect information

→ If successful, DD for rice falls as people adopt a healthier lifestyle by consuming less carbohydrates → corrects problem of overconsumption of rice & thus allocative inefficiency in the rice market, reduced problem of inequity as the price of rice falls.

## Evaluative conclusion:

Whether Indonesia should follow Mexico's policy of taxation in its push to discourage Indonesians from consuming rice may depend on severity of the market failure in the case of rice. If the market failure is severe (which may be evidenced by diabetes as the leading cause of death in Southeast Asia as highlighted in Extract 3), the Indonesian government may need to consider Mexico's policy of taxation to deter its citizens from consuming rice, especially if the current food diversification program is unsuccessful. However, as the nature of rice in Indonesia is likely to be different from that of sweetened drinks in Mexico, the indirect tax on rice needs to be significantly large for it to be effective at discouraging the quantity demanded of rice. Indonesian government should also complement the tax policy with other policies such as campaigns such as on educating the public on living a healthy lifestyle so as to effectively address the root cause of market failure.

	<b>Knowledge, Application/ Understanding and Analysis</b>
L3 (6-9)	An answer that explains why Indonesian government should AND should not follow Mexico's policy of taxation in its push to discourage Indonesians from consuming rice. Good use of case study evidence is present.
L2 (3-5)	A descriptive answer that may explain only why the Indonesian government should OR should not follow Mexico's policy of taxation in its push to discourage Indonesians from consuming rice. Little or no use of relevant case study evidence.
L1 (1-2)	A vague answer or listing of points on why Indonesian government should and/or should not follow Mexico's policy of taxation in its push to discourage Indonesians from consuming rice
	<b>Evaluation</b>
E2 (2-3)	Judgement with reasoned justification
E1 (1)	Judgment without reasoned justification

## CSQ2 – Suggested Answers and Mark Scheme

- (a) **Summarise the trends in life expectancy and healthcare expenditure between Singapore and the UK from 2010 to 2015.** [2]

**Both** healthcare expenditure and life expectancy **increased** for **both** countries. [1]

However, Singapore's life expectancy was **higher than** the UK's, despite spending a **smaller** proportion of GDP on healthcare. [1]

OR, Singapore's life expectancy **rose faster**, while healthcare expenditure as a percentage of GDP **rose slower** than the UK's. [1]

- (b) (i) **What evidence is there in the data that real interest rates were negative in the UK?** [2]

Given that real interest rates is equal to nominal interest rates minus inflation rates (or, real interest rates is nominal interest rates which take into account inflation) [1], Table 1 suggests that real interest rates were negative from 2012 to 2014, since nominal interest rates were lower than inflation rates during the period [1].

- (ii) **Explain the effects of negative real interest rates in the UK on the debts of its youths.** [2]

Interest rates represent **cost of borrowing for debtors**. [1]

With negative real interest rates, the **interest repayment in real terms falls**, hence eroding the real value (or opportunity costs) of debt over time. [1]

- (c) **Using the concept of production possibility curve, explain how raising re-employment age in Singapore allows the overcoming of its constraints, and comment on whether this measure will be appropriate.** [7]

[Total 4 marks] for explanation:

**PPC shows the maximum combinations of two goods and services a country can produce within its geographical boundary in a year, when all resources are fully and efficiently employed at current state of technology.** This also represents the constraint arising from scarcity, as the economy would be unable to consume combinations of goods beyond its PPC. [1]

Raising the re-employment age allows elderly to remain in the workforce and **expand the amount of labour available** in the economy. [1] This would serve to



**increase the economy's productive capacity** (shifting the PPC outwards) assuming these elderly workers are perfectly substitutable in the production of either goods or services. [1] Therefore, **more goods and services could potentially be produced and consumed** by Singaporeans. [1]

[Up to 3 marks] for comment: *Candidates' comments should link back to the question on overcoming constraints.*

(Note that the below is non-exhaustive, and marks are awarded based on the presence of (i) a clear stand, and (ii) strong justifications for it.)

- This measure is appropriate in overcoming Singapore's constraints as it effectively increases the amount of labour available in the economy, in the context of ageing population.
- However, increasing re-employment age does not necessarily ensure jobs are secured for these elderly. In the event that the elderly are not able to secure employment e.g. due to skill mismatch, they would represent idle resources which suggests the economy might be consuming at a similar initial point within the PPC.
- Another possible limitation may be the nature of work available for the elderly. The wages offered may be meagre, and the elderly may be unwilling to re-enter the workforce. Hence, there must be policies such as the Silver Support Scheme for the bottom 20-30% of Singaporean workers aged 65 and above (Extract 6), to encourage participation in the labour force through wage supplement by the government.
- Also, there is a real limit to how much higher the re-employment age can go for someone to still be in a position to contribute meaningfully through work.
- Furthermore, the skillset of the elderly may have been lost over time. Hence, there will need to be necessary support for reskilling and upskilling for these elderly, such as through SkillsFuture initiatives on retraining.

**(d) (i) Identify and explain two possible relationships between fiscal position, transfer payment and inclusive growth.** [4]

Possible answers: *Candidates should (i) state the relationship, or describe how the entities are related, and (ii) explain the relationship.*

(Below are possible answers, but candidates are required to identify and explain two distinct relationships between two entities, to gain full credit. Alternatively, fully explaining how all three entities are related can also gain full credit.)

- Fiscal position and transfer payment share an inverse relationship. / An increase in transfer payment worsens the fiscal position. / A reduction in transfer payment improves the fiscal position. [1]

An increase in transfer payment such as welfare benefits represents an increase in government expenditure and hence worsens the fiscal position (either increase in fiscal deficit, or decrease in fiscal surplus). [1] (Or vice versa).

- Fiscal position and transfer payment share a positive relationship. / An improvement in fiscal position can facilitate an increase in transfer payment. / A worsening fiscal position can lead to a reduction in transfer payment. [1]



Since fiscal position is measured by government revenue minus government expenditure, an improvement in fiscal position (either increase in fiscal surplus, or decrease in fiscal deficit) means an increase in government ability to fund transfer payments such as welfare benefits. [1] (Or vice versa).

- Transfer payment and inclusive growth share a direct relationship. / An increase in transfer payment promotes inclusive growth. [1]

As economic growth takes place, the government collects more tax revenue (e.g. income tax revenue due to the progressive income tax system) which it can then use to finance more transfer payments for the lower income group. This ensures that the benefits of growth is enjoyed by the majority, thereby achieving inclusive growth. [1]

- Fiscal position, transfer payments and inclusive growth share a direct relationship. / An improvement in fiscal position facilitates an increase in transfer payments, which promotes inclusive growth. [2]

Since fiscal position is measured by government revenue minus government expenditure, an improvement in fiscal position (either increase in fiscal surplus, or decrease in fiscal deficit) means an increase in government ability to fund transfer payments such as welfare benefits. As economic growth takes place, the government collects more tax revenue (e.g. income tax revenue due to the progressive income tax system) which it can then use to finance more transfer payments for the lower income group. This ensures that the benefits of growth is enjoyed by the majority, thereby achieving inclusive growth. [2]

**(ii) Explain how rising youth unemployment and aging population may affect a government's ability to achieve the objective of inclusive growth.**

[5]

Define 'inclusive growth':

Inclusive growth refers to sustained economic growth with assurance that all sectors of the economy would be able to enjoy the benefits of the growth. [1]

Explain how growth could be affected:

- Rising youth unemployment worsen outlook on the economy as the young graduates are unable to secure a job. The high unemployment will erode average household income levels and generally lower the desire to consume big-ticket items. Hence, autonomous consumption falls leading to a fall in AD and real national income through multiplier effect. [2]
- OR, Aging population typically leads to a shrinking labour force as more workers retire. The smaller labour force will limit the productive capacity of the economy and result in a smaller expansion of LRAS. This would hamper future economic growth as any increase in AD may lead to demand-pull inflation instead of an increase in real national output. [2]

Explain how distribution of income could be affected:

- A reduction in economic growth will worsen the government's fiscal position, since less tax revenue will be collected in the form of income tax, and more government spending will need to occur to provide unemployment benefits. As such, this reduces the government ability to spend on income redistribution, such as on skills and training subsidies or wage subsidies to uplift the low-skilled low-wage workers. [2]

(e) Explain the following statement using economic analysis:

**“Immigration creates economic growth and employment which can benefit younger workers.” (Extract 8)**

[4]

Immigration increases the population size of the economy and stimulates consumption component of the AD. [1] This serves to increase AD and therefore real national income through the multiplier process. As such, the increase in real national income reflects actual growth. [1] Furthermore, the increase in supply of labour expands the productive capacity of the economy, causing LRAS to increase, thus resulting in potential growth. [1] As AD rises, the firms will experience an unplanned fall in inventory, which is a signal to step up production. In doing so, the firms may have to hire more labour (derived demand) and thus a fall in cyclical unemployment. This benefits the younger workers as more job opportunities will be made available. [1]

(Other reasons for an increase in AD, e.g. increase in I which leads to actual growth and creates employment opportunities are acceptable, as long as candidates could explain the link from immigration.)

(f) **“As for the causes of youth unemployment, there are views that older workers are displacing young workers” (Extract 8). Discuss the validity of this statement.**

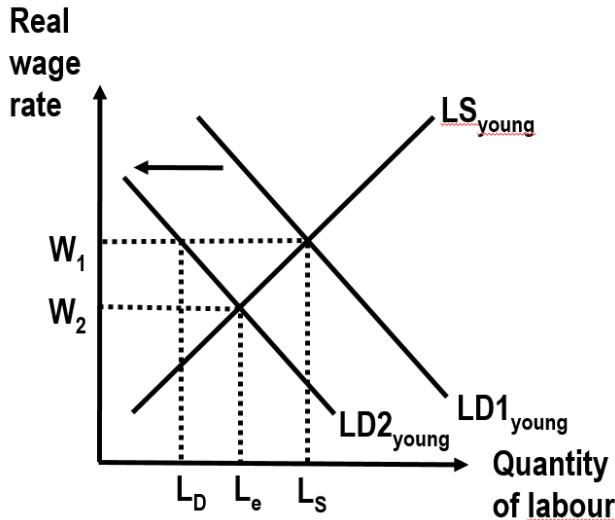
[8]

<b>Content</b>	Causes of youth unemployment
<b>Context</b>	Youth unemployment in the UK
<b>Command</b>	Discuss + Evaluate

**Thesis: Older workers displace young workers to bring about youth unemployment** (use labour market analysis to explain case evidence)

- Older workers have relevant working experience, life skills and deeper skills and competencies (Ext. 8 Para 2) → more productive → more employable than young workers → increase in demand for older workers and fall in demand for young workers.
- In the youth labour market (Figure 1), fall in labour demand from  $LD1_{\text{young}}$  to  $LD2_{\text{young}}$  → surplus of labour ( $L_D L_S$ ) at the original wage rate  $W_1$ , due to wage rigidity. Thus, youth unemployment results.

Figure 1: Fall in demand for young workers

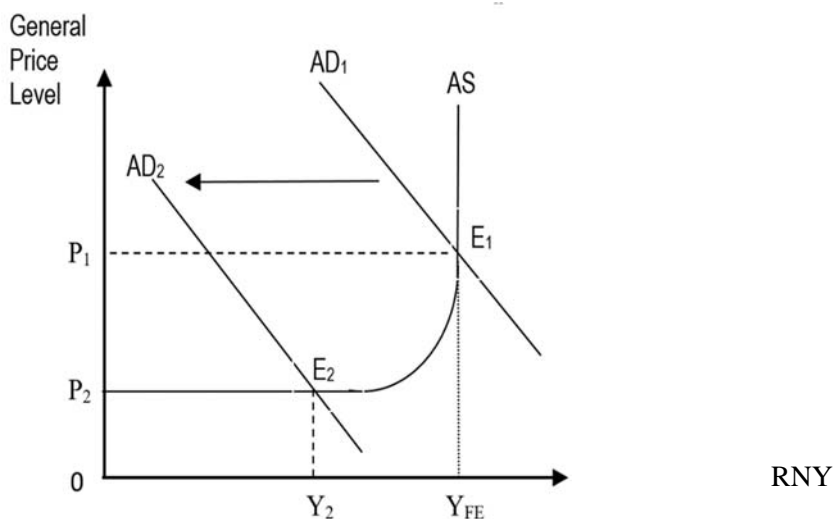


**Anti-thesis: *Other causes of youth unemployment***

**i. Demand-deficient unemployment**

- Fall in AD from  $AD_1$  to  $AD_2$  → unplanned increase in firms' stocks → firms reduce production → firms reduce demand for labour (since labour is a derived demand) → demand-deficient unemployment as represented by the output gap  $Y_2Y_{FE}$  in Figure 2.
- There is reason to believe that young workers in particular, will be laid off first during a fall in AD, since they are less valuable to the firms given their relative lack of work experience and skills. In contrast, Ext 8 Para 1 suggested that positive economic developments – in terms of GDP growth driven by greater services and consumer spending, were particularly helpful to younger workers in boosting their employment.

Figure 2: Demand-deficient unemployment



**ii. Frictional unemployment**

- Labour market imperfections → workers ignorant of available job opportunities, while employers are not fully informed about what labour is available → lengthens the search time taken for someone in between jobs → unemployed for a period of time while they are searching for a new job → frictional unemployment.

- In particular, the youths may be unfamiliar with the world of work, the positive opportunities available particularly in the dynamic areas linked to new technologies (Ext 8 Para 4) → so it takes them relatively longer to find out about available job opportunities.

### iii. Structural unemployment

- Youths could also be unemployed if they do not possess the necessary skills which are in demand in the economy. The result is a mismatch of skills (arising from labour immobility) of the unemployed and the existing job vacancies.
- For example, if an economy develops and moves up the value chain due to change in production techniques → expansion of 'sunrise' industries (e.g. medical tech) and contraction of 'sunset' industries (e.g. life sciences) → if youths were trained in the life sciences skills when in school, but the life science industry has demised by the time they graduated, these youths will not possess the right skills to take on the vacancies in the medical tech industry → structural unemployment.

Level	Descriptors	Marks
L2	For an answer that explains how older workers displace young workers to cause youth unemployment, <b>AND at least one other cause</b> of youth unemployment, using analysis and where necessary, a diagram. Case evidence should also be used for the highest mark.	4 - 6 m
L1	For an answer that explains how older workers displace young workers to cause youth unemployment, OR at least one other cause of youth unemployment.  Alternatively, for an answer that considers BOTH perspectives but is vague and/or descriptive, lacking in economic rigour.	1 - 3 m

In addition, there are a **further 2 marks for evaluation** i.e. to articulate and justify whether older workers replacing young workers is cause of youth unemployment.

- Youth unemployment is **multi-causal**, and not only caused by the old displacing the young. The young has skills (e.g. creativity) which are valued by employers as well.
- What matters more is that the young possesses skills which are relevant to the workplace (while frictional unemployment is temporary and unlikely to be significant).
- Depending on the **nature and state of the economy**, demand-deficient unemployment may be more significant/severe than structural unemployment.

(g) **Using information provided and/or your own knowledge, assess the effectiveness of the policies in addressing youth unemployment in the UK.**

[11]

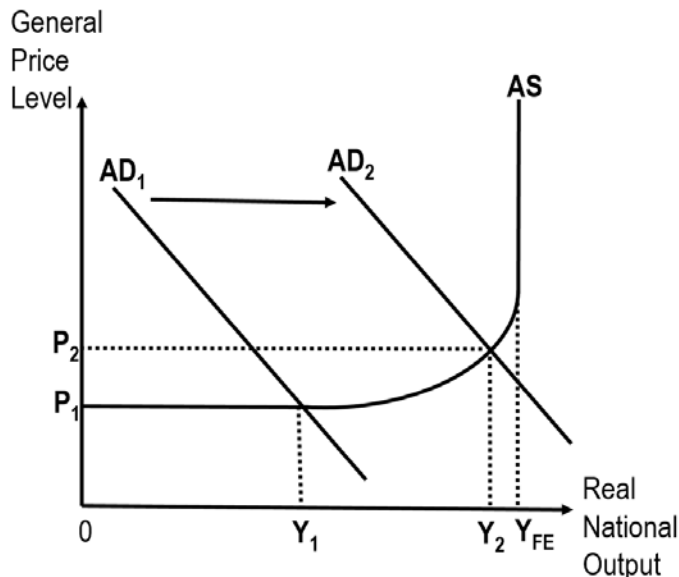
<b>Content</b>	Policies to address youth unemployment
<b>Context</b>	Youth unemployment in the UK
<b>Command</b>	Assess + Evaluate

[Students to choose 2 of the 3 policies below to analyse and assess. Their choice should comprise policy 1 / 2 + 3 / 4 – i.e. one demand-management and one supply-side policy in total].

### Policy 1: Expansionary FP to raise growth and create employment.

- Increase  $G$ , and/or reduce personal income tax and/or corporate income tax → increase in disposable income and/or increase in after-tax profits → increase in  $C$  and/or  $I$  → increase in  $AD$  from  $AD_1$  to  $AD_2$  → unplanned fall in firms' stocks → firms increase production → firms hire more labour since labour is a derived demand → narrowing of output gap from  $Y_1 Y_{FE}$  to  $Y_2 Y_{FE}$  in Figure 3.

Figure 3: Expansionary fiscal policy



- In hiring more labour, unemployed youths will become employed (Ext 8 Para 1: effects of increase in  $C$  on growth and lowering of no. of youth unemployed).

Policy limitations: (non-exhaustive but the following outlines the key limitations based on contextual evidence)

- Fiscal constraints limit the UK govt's ability to spend.
  - o This is especially so in light of competing demands for increased govt spending, such as from the healthcare sector due to ageing population (Ext 7). Ageing population has resulted in a rise in govt spending and a fall in tax revenue (e.g. income tax revenue) as the elderly fall out of the workforce → worsening fiscal/budget position and possible fiscal/budget deficit.
  - o Even if govt spending on the healthcare sector can generate growth and lower demand-deficient unemployment, it may not be the youths who become employed since they may not possess the right skills and knowledge to work in the healthcare sector where the job opportunities are generated.
- Uncertainties due to Brexit may limit the effectiveness of the policy.
  - o Consumers do not increase  $C$  despite cuts in personal income tax raising their disposable income, as they would rather save for the rainy day in the event that the UK falls into a recession when Brexit is effected.
  - o Firms do not increase  $I$  despite cuts in corporate income tax raising their after-tax profits, as they adopt a wait-and-see attitude before taking on long-term investments in the form of capital spending.

**Policy 2: Expansionary MP to raise growth and create employment.**

- Cuts in interest rate ( $i/r$ ) → fall in cost of borrowing → consumers increase  $C$  as they purchase big-ticket items on credit, and firms increase  $I$  as previously unprofitable levels of investment become profitable →  $AD$  increases → *reduces demand-deficient unemployment in a similar fashion as expansionary FP does (see above and Figure 3).*

Policy limitations: *(non-exhaustive but the following outlines the key limitations based on the state of UK economy)*

- Uncertainties due to Brexit may limit the effectiveness of the policy.
  - o Consumers and firms are unresponsive to the cuts in  $i/r$  due to poor confidence about the current and near-future state of the UK economy.
- Near-zero  $i/r$  limits the extent to which  $i/r$  can be cut to bring about the intended outcomes on employment.
  - o The central bank has previously cut  $i/r$  repeatedly to boost the economy in the aftermath of the Great Financial Crisis. As recovery was slow and uncertain, expansionary MP has been used many times such that  $i/r$  is already low – with little room to cut it further to address youth unemployment.

**Policy 3: Supply-side policy in the form of vocational education and training to address structural unemployment amongst youths**

- The UK could re-emphasise the importance of apprenticeship to equip youths (during their schooling years and in the early phase of their careers) with the skills needed by the economy (Ext 8 Para 3) → increases their employability → increase supply of rightly-skilled youths → addresses mismatch between skills possessed by youths and job opportunities available → reduces structural unemployment.
- The UK government is committed to ensuring 3 million new apprenticeships between 2015 and 2020, so the large scale at which the policy is being rolled out may prove it effective.

Policy limitations: *(non-exhaustive but the following outlines the key limitations based on contextual evidence)*

- Response time lag may limit the effectiveness of the policy.
  - o Long response time lag due to the need for mindset change amongst both youths and employers. Ext 8 Para 3 states the govt objective of putting vocational training and apprenticeships on a par with graduate qualifications. This signifies an entrenched mindset that graduate qualifications are more superior than vocational qualifications. If mindsets remain unchanged, the youths will not take up the vocational training opportunities, while employers will not be keen to hire vocationally-trained youths, both rendering the policy ineffective.
- Govt failure may limit the effectiveness of the policy.
  - o The UK govt may lack complete info on the skills needed by the economy → vocational training and education may not be in the skills which the economy requires → mismatch of skills persists.

**Policy 4: Supply-side policy to improving labour market info to address frictional unemployment amongst youth.**

- Govt intervene by providing platforms for employers to be engaged with young people and schools, so there is more familiarity with the world of work throughout the education system. This can include work experience, career advice,

mentoring and community youth initiatives supported by business. (Ext 8 Para 4) → ease information flows between youths and potential employers → reduce search time → reduce frictional unemployment.

Policy limitations:

- Effectiveness depends on employers' and students/prospective workers' attitudes and responsiveness.
  - o Both students and employers must be receptive towards the use of the platforms created by the govt, which would otherwise be utilised.

Level	Descriptors	Marks
L3	For an answer that analyses <b>at least two policies (including one demand-management and one supply-side policy) and their limitations</b> in addressing youth unemployment, in the UK context. Use of relevant diagram(s) is present.	<b>6 - 8 m</b>
L2	For an answer that lacks scope (i.e. only one policy and its limitations, OR two policies without limitations); OR an answer that lacks depth (i.e. two policies and their limitations but not fully analysed).	<b>3 - 5 m</b>
L1	For an answer that is vague and/or descriptive, lacking in economic rigour.	<b>1 - 2 m</b>

In addition, there are a **further 3 marks for evaluation** i.e. making a stand on how effective policies adopted were, considering the following (again, non-exhaustive):

- **Root causes.** Ultimately, the effectiveness of the policies will depend on whether the right policy is being used for the right type of (and hence cause of) youth unemployment. Given the multi-causal nature of youth unemployment in the UK, a range of policies should be adopted in tandem in order to reduce youth unemployment.
- **State of economy.** Since growth is uncertain and confidence amongst consumers and firms is weak in the UK, the govt needs to push through with the expansionary FP/MP to bring about any intended outcomes in the **short-run**, and at the same time, commit to the **long-run** supply-side policy on vocational training and education to boost confidence.
- **Other suggestions (to mitigate policy limitations).** The govt will need to consider how to speed up the change in mindsets towards vocational training and education as it can be a key limitation on the effectiveness of the supply-side policy. This can be done through working more closely with the schools and labour unions to persuade them of the value of vocational training and education.