MERIDIAN JUNIOR COLLEGE
JC2 PRELIMINARY EXAMINATION 2017

H1 Economics **8819/01**

Case Study and Essay Questions **11 September 2017**

3 hours

Additional Materials: Writing Paper

READ THESE INSTRUCTIONS FIRST

Do not open this booklet until you are told to do so.

Write your name, class and register number in the spaces at the top of the answer sheets.
Write in dark blue or black pen.
You may use an HB pencil for any diagrams or graphs.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Section A
Answer **all** questions.

Section B
Answer **one** question.

Begin each question on a fresh sheet of paper.
At the end of the examination, fasten all your work securely to the cover sheet with the string provided.
The number of marks is given in brackets [ ] at the end of each question or part question.

[Turn Over]

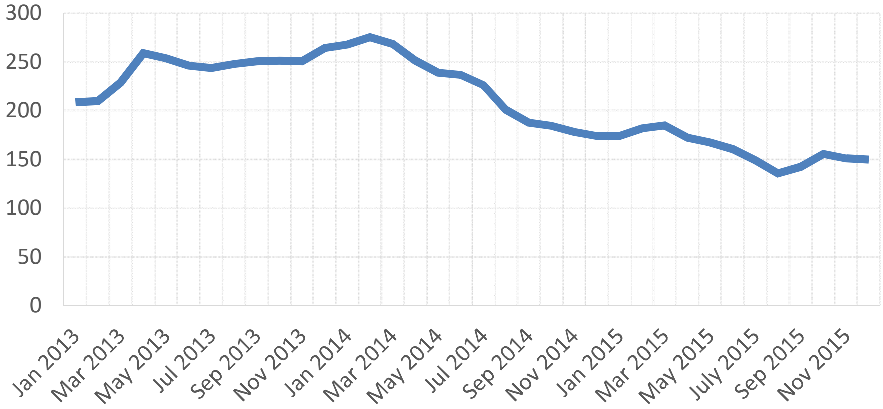
This document consists of **8** printed pages and **3** cover sheets.

Section A

Answer **all** the questions in this section.

Question 1 The market for milk in Canada

Figure 1: Dairy Price Index, 2013-2015



Source: Food and Agriculture Organisation of the United Nations

Extract 1: The dairy industry - Turning sour

Little over a year ago, New Zealanders were still talking about a “white-gold rush”. Strong prices for milk were prompting cattle ranchers who produce beef to convert to dairy farming, and Chinese firms were coming in to buy up agricultural land and milk processors. Inevitably, influx has led to glut. Prices have fallen to their lowest in more than ten years. Farmers in France, Britain and Belgium have recently been staging protests against low milk prices, but few places are as badly affected as New Zealand, whose dairy industry produces a quarter of its export earnings. Facing sliding incomes, New Zealand’s dairy farmers are expected to cull one-in-six cows this year.

There are two main reasons why the milk trade has turned sour. One is the economic slowdown in China, a giant market where consumption for dairy produce had until now been growing strongly. Another is the removal of the European Union’s (EU) dairy-production quotas earlier this year, which does away with limits on the amount of milk each farm could produce, encouraging big producers in Germany, the Netherlands and elsewhere to boost their output and exports.

Source: *The Economist,* 13 August 2015

Extract 2: Protectionism in Canada’s dairy market

Critics of Canada’s dairy sector highlight that the protection of the industry via sky-high tariffs ensures that the Canadian market remains closed to all but a tiny wedge of dairy imports. Advocates of opening Canada’s dairy market to global competition from foreign firms insist it would be a boon to the farmers with potential to be more efficient, allowing them to grow by exporting their products internationally. But that fails to justify the painful fate that would likely await the vast majority of Canada’s 12,000 dairy farms. Having been sheltered from competition for so long, the relentless demands for lower costs and higher productivity would overwhelm most family-run dairy farms.

Those demands are only growing fiercer. The European Union's move earlier this year to abolish milk production quotas is expected to lead to a surge in production in countries with the most efficient dairy sectors. Then there's the United States, where industrial-sized dairy farms with more than 10,000 cows are not uncommon. (The average Canadian dairy farm has 77 cows.) At the Trans-Pacific Partnership talks, the United States is pushing harder than any other country for access to the Canadian dairy market. New Zealand's dairy sector rode the Chinese boom until growth there flinched. China now has big stockpiles of whole-milk powder, leading most analysts to predict that low global milk prices will be around for a while.

That is likely good news for most of the world's consumers, provided processors and retailers pass on those savings. But it's bad news for large dairy-exporting countries such as New Zealand, which bet that China's thirst for its milk would be unquenchable. Not only are European producers now eyeing the Chinese market. Domestic production is growing fast in China – one particular operation has 140,000 cows.

Were Canada to finally join the global milk market, consumers here (particularly the poorest ones) would benefit most. Dairy farmers, not so much. But that is what free trade is all about. As Adam Smith wrote in The Wealth of Nations: "It is the maxim of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy." Countries prosper by focusing on what they do best.

Source: *The Globe and Mail*, 29 July 2015

Extract 3: Should the government intervene in the dairy market?

Until quite recently, the production of many agricultural goods was local. But technology, including ultra-high temperature treatment, means milk can be kept for up to a year and shipped without refrigeration, turning milk from local into a global tradable commodity. Thus, it may be that Canada would be a better place if milk production moved to the countries that could produce it most cheaply allowing them to cut their costs so they could go head to head with global producers from China and New Zealand.

But knowing how markets work, it may be likely that losing much of the dairy industry to overseas competitors by removing tariffs would not bring food cost down much in the long term. The cost difference would merely be absorbed by some other part of the production chain. Meanwhile, the advantages of having a strong domestic industry are about more than the price of milk. Canadian dairy farmers remain in the country and don't move overseas so government's tax revenue is not affected. In the current global shakeout in the dairy industry, it might be worthwhile hanging on to that industry at least until the shakeout is over. Maybe well-made Canadian milk products, without hormones, with love, will soon sell overseas at a premium.

Source: *CBC News*, 27 November 2015

Questions

(a) **(i)** Using the data in Figure 1, describe the trend of dairy prices from 2013 to 2015. [2]

(ii) With reference to Extracts 1 and 2, assess the relative importance of demand and supply factors in accounting for the overall trend of dairy prices. [6]

(b) With the aid of diagrams, explain the impact of "strong prices for milk" (Extract 1) on the resource allocation between the market for beef and the market for dairy. [4]

(c) Explain how the development of "ultra-high temperature treatment" technology (Extract 3) might change the price elasticity of supply for milk. [2]

(d) "It is the maxim of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy." Countries prosper by focusing on what they do best. (Extract 2)

Using the concept of opportunity cost, explain why Canada is likely to import milk while countries like the United States and New Zealand export it. [6]

(e) **(i)** Explain what is meant by the term protectionism. [2]

(ii) Discuss whether protection of the Canadian milk industry using "sky-high tariffs" (Extract 2) is justified. [8]

[Total: 30]

Question 2 Growth and competitiveness

Table 1: Real Gross Domestic Product growth, annual percentages, 2010-2017

	2010	2011	2012	2013	2014	2015	2016	2017
United Kingdom	1.9	1.5	1.3	1.9	3.1	2.2	1.8	1.7*
Singapore	15.2	6.2	3.9	5.0	3.6	1.9	2.0	2.2*
World	5.4	4.2	3.5	3.4	3.5	3.4	3.1	3.5*

*forecasted

Source: International Monetary Fund (IMF), 2017

Extract 4: IMF downgrades UK's economic growth

The International Monetary Fund (IMF) has slashed its growth forecast for the UK, citing a slump in economic performance since last year's vote to quit the EU. It now expects the UK economy to grow by 1.7 per cent this year compared to a previous forecast of 2 per cent.

The UK economy initially proved resilient in the aftermath of last June's referendum, but in recent months – largely driven by a tumble in the value of the pound – inflation has spiked to close to 3 per cent squeezing real wages. The economy grew by just 0.2 per cent in the first quarter of 2017, making it the slowest-growing advanced economy.

Source: The Independent, 24 July 2017

Extract 5: Pound sterling's fall lifts UK exports

Britain's trading position with the rest of the world improved markedly in the final three months of 2016. As pound's fall made UK goods more competitive on overseas markets, there was a significant narrowing in the UK's current account deficit, the latest Office of National Statistics (ONS) growth figures showed. Economists said the rebalancing towards more exports would offset some but not all of the slowdown in consumer spending expected this year as incomes are squeezed.

Before last year's referendum on EU membership, the Bank of England had highlighted Britain's record current account gap and noted that the UK relies on foreign investors to fund the shortfall. The Bank's governor, Mark Carney, expressed concern that in the event of a vote to leave the EU, foreign investors would become more nervous about buying or holding UK assets.

Howard Archer, an economist at consultancy IHS Markit, said, "Sterling's marked weakening appears to be increasingly feeding through to lift exports, as the global economy recovers. This could be good news for the UK government." However, the Office of Budget Responsibility (OBR) warned that the cumulative budget deficit from 2017 to 2021 would be about larger than originally forecast, mainly due to greater debt repayments and lower tax rates in the midst of uncertainties.

Source: The Guardian, 31 March 2017

Extract 6: How Brexit Affects Singapore

Brexit isn't bad news for everyone in Singapore. Companies like Hart Technologies, a Singapore-based dealer of fire protection equipment, will benefit from the pound's sharp drop against the Singdollar, as its imports from the UK are now cheaper. Britain is currently No. 22 on the list of Singapore's trading partners.

But the pound's volatility cuts both ways. In the near term, the pound's free fall against most currencies is expected to hurt Asian exporters with strong exposure to UK markets, or with earnings denominated in pounds. But that is broadly manageable unless Brexit drags down demand across the EU as well, which would result in Asian exporters feeling a bigger squeeze, said Mr Frederic Neumann, HSBC co-head of Asian Economic Research. Economists are also concerned that Singapore's overall economy will be affected if British companies here start to pull back on investment in manufacturing, while expecting some foreign investment in UK to be redirected to the Asian region.

An even bigger uncertainty in the long term is whether more European countries will follow Britain and leave the EU, which is Singapore's second-largest trading partner after China. That would be a messy affair and its impact on the global economy, including Singapore's, will be severe, as trade, investment and labour mobility within Europe would be affected.

Source: The Straits Times, 29 June 2016

Extract 7: Singapore slips in global competitiveness rankings

SINGAPORE has fallen to fourth place - from third a year ago - on business school IMD's latest ranking of the world's most competitive economies. The IMD World Competitiveness Yearbook 2016 highlights perennial issues of high costs and talent attraction as growing challenges to Singapore's competitiveness. Singapore recently experienced the slowest GDP growth in six years and the flattest employment growth in more than a decade.

"The sentiment seems to be that Singapore has to strengthen its production of qualified engineers and managers. It relies mainly now on talent that is coming into the country and while Singapore remains one of the best places to live, given the cost of living, this becomes relatively more difficult," said Christos Cabolis, chief economist at the IMD World Competitiveness Center.

The cost of doing business too, features negatively in the IMD report. Cost competitiveness has in previous years been at or near the bottom of a list of "attractiveness indicators". Furthermore, the reality of regional competition is that labour in other Asian economies is becoming increasingly skilled, yet not as expensive as Singapore's. Infrastructure is also being built rapidly in other Asean economies and knowledge transfer is taking place too. All this could erode Singapore's relative competitiveness further.

The details of the IMD report were not all bad news. Indicators such as productivity, labour market, attitudes and values and basic and scientific infrastructure showed slight improvements from a year ago. However, there seems to be still room for further progress in labour productivity. A slow decline in Singapore's competitiveness is reflected through a smaller share of world exports, both in services and manufacturing, and of world foreign direct investment. Singapore's policy response to the competitiveness challenge - from Skills Future to productivity incentives and government initiatives to boost certain industries and start-ups may still fall short of a guarantee.

Source: The Business Times, 31 May 2016

Questions

(a) **(i)** Explain the meaning of 'real GDP'. [2]

(ii) Compare the growth rates of UK and Singapore from 2010 to 2016. [3]

(b) **(i)** With the aid of a diagram, explain why the pound sterling depreciated following UK's vote to leave the EU. [3]

(ii) Explain two reasons for an improvement in UK's trade balance. [4]

(iii) Comment on the impact of pound sterling's depreciation on the UK government budget. [4]

(c) To what extent do you agree with the view that uncertainty about Brexit negotiations is only harmful to the Singapore economy? [6]

(d) Extract 7 highlights that a slow decline in Singapore's competitiveness is reflected through a smaller share of world exports and foreign direct investment.

Discuss whether the Singapore government should prioritise raising labour productivity to enhance the economy's competitiveness. [8]

[Total: 30]

Section B

Answer **one** question from this section.

3 **(a)** Explain how externalities can result in market failure. [10]

(b) Negative externalities arising from production of a good gives rise to market failure. Discuss the extent to which price elasticity of demand for a good affects the appropriateness of using indirect taxation to correct this market failure. [15]

4 **(a)** Explain why governments aim to achieve a low and stable inflation. [10]

(b) Discuss the view that the Singapore government should use exchange rate rather than interest rate to achieve price stability. [15]

- End of Paper -

MERIDIAN JUNIOR COLLEGE

JC2 PRELIMINARY EXAMINATION 2017

8819/1

COVER SHEET

H1 ECONOMICS

Section A: Case Study Question 1

Name: ______________________________ Civics Group: ____________________

Register Number: ____________ Tutor: ____________________

11 September 2017

READ THESE INSTRUCTIONS FIRST
Write your name, civics group, register number and tutor's name in the spaces at the top of this cover page and on all the work you hand in.

At the end of the examination, fasten this cover sheet to your answer scripts for Case Study Question 1 with the string provided before submission.

QUESTIONS ATTEMPTED		**MARKS**
(a)	**(i)**	
	(ii)	
(b)		
(c)		
(d)		
(e)	**(i)**	
	(ii)	
TOTAL		**/30**

MERIDIAN JUNIOR COLLEGE

JC2 PRELIMINARY EXAMINATION 2017

8819/1

COVER SHEET

H1 ECONOMICS

Section A: Case Study Question 2

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QUESTIONS ATTEMPTED		**MARKS**
(a)	**(i)**	
	(ii)	
(b)	**(i)**	
	(ii)	
	(iii)	
(c)		
(d)		
TOTAL		**/30**

MERIDIAN JUNIOR COLLEGE
JC2 PRELIMINARY EXAMINATION 2017

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COVER SHEET

H1 ECONOMICS

Section B: Essay Question

Name: ______________________________ Civics Group: ____________________

Register Number: ____________ Tutor: ____________________

11 September 2017

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At the end of the examination, fasten this cover sheet to your answer scripts with the string provided before submission.

Please indicate the question number you have attempted.

QUESTION ATTEMPTED		**MARKS**
Question _____	**(a)**	
	(b)	
Total		**/25**

JC2 2017 Prelim Examination

H1 Economics (8819)

Suggested Answers

Case Study 1

<table>
<tr><td>(a)</td><td>(i) Using the data in Figure 1, describe the trend of dairy prices from 2013 to 2015.</td><td>[2]</td></tr>
<tr><td></td><td>Dairy prices are generally falling over the period by 28%.
However, prices initially increased from 2013 to March 2014.</td><td></td></tr>
<tr><td></td><td>(ii) With reference to Extracts 1 and 2, assess the relative importance of demand and supply factors in accounting for the overall trend of dairy prices.</td><td>[6]</td></tr>
<tr><td></td><td><u>Demand Factor (At least 1)</u>
“economic slowdown in China…a giant market…had until now been growing strongly” → ↑NI → ↑PP →↑demand for normal goods such as milk
Eval: Extent of increase in demand is likely to be small as there is a slowdown where the growth rate of income has decreased thus income is increasing at a slower rate.
<u>Supply Factor (At least 1)</u>
“removal of dairy-production quota” (Ext 1) → with the removal of the production quotas in EU → producers in EU are no longer limited in the amount of milk they are allowed to produce → increase in supply of milk
Eval: Extent of ↑supply is likely to be large → as many of the EU producers like Germany and Netherlands are “big producers” which contribute significantly to the global milk market.
“increase in domestic production” in China (Ext 2) → further increase in supply
Big stockpiles of whole-milk powder → PES>1 → given a ↑price, qty ss would increase more than proportionately as producers will be able to use their stocks to raise quantity supplied to a greater extent.
<u>Analysis of Price</u>
Market is initially at equilibrium at price P1 and output Q1.
An increase in demand will lead to an increase in price while an increase in supply will result in a fall in price. The impact on price is indeterminate and depends on the extent of the shift in demand and supply.
As explained above, the shift in demand is likely to be relatively smaller than the shift in supply → [Adjustment process] overall, there will be a surplus created → downward pressure on prices → new equilibrium at a lower price as seen in Figure 1 and question (ai)
<u>Conclusion/Judgement</u>
As the fall in price is mainly due to the large fall in supply relative to the demand, the supply factors play a more important role in determining the overall fall in price.
In addition, as PES>1, the increase in demand is also likely to result in a relatively small increase in price → demand factor is again not as important in explaining the change in price.</td><td></td></tr>
</table>

Level	Knowledge, Application, Understanding & Analysis	Marks
L2	Responses in this level will give an analysis of the factor including a judgement about the relative importance of the factors.	4-6
L1	Responses in this level will be largely descriptive.	1-3

(b) **With the aid of diagrams, explain the impact of “strong prices for milk” (Extract 1) on the resource allocation between the market for beef and the market for dairy.** **[4]**

- Resources such as land for farming are limited and there are many “wants” for the land such as for the purposes of cattle ranching or dairy production. The beef market and the dairy market are in competitive supply.
- “Strong prices for milk” → suggests an increase in price of milk due to ↑demand → ↑output of milk → incentive for farmers to switch production away from less profitable markets such as beef to the now more profitable dairy production.
- There is a fall in supply for beef as resources are reallocated from beef to milk production.

(c) **Explain how the development of “ultra-high temperature treatment” technology (Extract 3) might change the price elasticity of supply for milk.** **[2]**

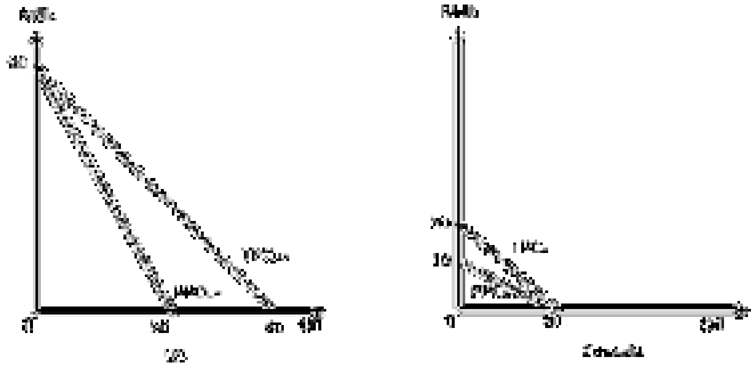
- Evidence: “UHT milk can be kept for up to a year and shipped without refrigeration”
- This increases the shelf life of the milk allowing for producers to keep stocks of the milk → any ↑price → M.T.P. ↑qty ss as producers are easily able to respond to the price increase by increasing qty ss through the use of their stocks of UHT milk.
- Supply is likely to be more price elastic than before.

(d) **“It is the maxim of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy.” Countries prosper by focusing on what they do best. (Extract 2)**

Using the concept of opportunity cost, explain why Canada is likely to import milk while countries like the United States and New Zealand export it. **[6]**

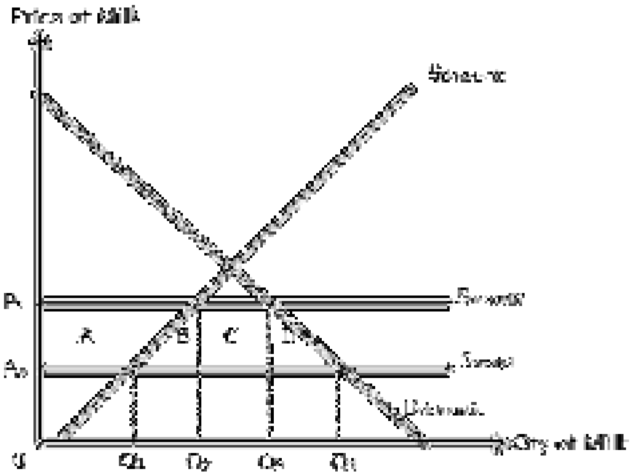
The theory of comparative advantages states that trade can benefit countries involved if they specialize in producing and trading those goods in which they have comparative advantage in and the terms of trade lies between the domestic opportunity cost ratios of the 2 countries. Comparative advantage refers producing a good a relatively lower opportunity costs. Opportunity cost is defined as the next best alternative foregone. Canada is likely to import milk as it does not have comparative advantage in milk production while other countries like US and New Zealand do.

Given a country such as Canada which has the ability to produce either 20 barrels of oil or 10 units of milk given its factor endowment which are mainly natural resources such as oil deposits. It faces constant opportunity costs of 2 oil for 1 milk. US on the other hand can produce either 30 oil or 60 units of milk with its resources whereby it has relatively more resources suited for milk

<table>
<tr><td></td><td>production. This is seen in extract 2 where the US farms have a relative abundance in milk related resources e.g.10,000 cows while Canadian farms on average have only 77. Its opportunity cost of 1 milk is 1/2 oil. This is illustrated by their PPC as follows:

The slope of the PPC represents the opp cost of producing oil (the good on the X-axis). Since US has the CA (lower opp cost) in milk it will specialise in milk while Canada will specialise in oil. They will select an acceptable TOT which lies between their opp cost ratios, ½ Oil<1 Milk<2 Oil. Assume the TOT is 1 Oil =1 Milk, both countries will now face a TPC with a slope of 1, which is the new opp cost for oil due to trade.

Both countries have benefitted from trade because (a) they can consumer greater quantities of goods and services on their TPC which is greater than their PPC and (b) they face a lower opp cost for consuming the goods. This raises their material SOL thus explaining why Canada imports milk and US exports milk.</td><td></td></tr>
<tr><td>(e)</td><td>(i) Explain what is meant by the term protectionism.</td><td>[2]</td></tr>
<tr><td></td><td>• Protectionism is a deliberate government policy to <u>erect trade barriers</u> in order to shield domestic industries from foreign competition.
• The aim of protectionism is to <u>switch expenditure</u> both domestic and foreign <u>to the output of goods and services of the domestic economy</u>.</td><td></td></tr>
<tr><td></td><td>(ii) Discuss whether protection of the Canadian milk industry using “sky-high tariffs” (Extract 2) is justified.</td><td>[8]</td></tr>
<tr><td></td><td>Introduction
• Protectionism is a deliberate government policy to <u>erect trade barriers</u> in order to shield domestic industries from foreign competition.
• The aim of protectionism is to <u>switch expenditure</u> both domestic and foreign <u>to the output of goods and services of the domestic economy</u>.

Thesis: There are reasons why protectionism may be justified
Analysis of Tariffs</td><td></td></tr>
</table>



- With the import tariffs imposed by Canada on milk → ↑unit COP of foreign firms' milk by the per unit tariff of PtPw → Sworld to Sw+tariff → price ↑ to Pt → domestic consumers switch to the relatively cheaper domestically produced milk → ↑domestic production from Q1 to Q2 and ↓qty of imports from Q1Q4 to Q2Q3.

1. **Protects against unemployment:** Assuming Canada does not have C.A. in production of milk as Canadian firms would be unable to compete with more efficient milk producing countries like US (Ext 2), opening up to free trade would result in a fall in domestic production to Q1 as households switch to relatively cheaper imports → ↓demand for labour in the milk industry → ↓employment or ↑structural unemployment (Can also explain how protectionism is used to slow down the decline of the milk industry)
   a. **Eval:** With the global price of dairy falling (Figure 1), the impact on unemployment when opened to free trade will be even greater (illustrated by an increase in Sw), leading to a larger extent of unemployment if there wasn't protection.
   b. **Eval**: As PES>1 as explained in part (d), the increase in domestic production is likely to be large as the increase in price due to the tariff will result in a more than proportionate increase in quantity supplied by domestic producers → larger ↑demand for labour → larger impact on employment.
2. **Ensures continued tax revenue for govt (Ext 3)**: With Canadian milk farmers remaining in business, their profits can be taxed as a source of revenue for the government. In addition, the tariff revenue also provides a source of revenue for the government.
3. **Allows time to develop the industry (Ext 2):** The protectionism can give them for the Canadian milk industry to develop the comparative advantage so as to one day grow to become an exporter of milk. This will benefit the economy through higher economic growth just as how New Zealand has gained from the growth of their milk industry. Farmers would also benefit from ↑profits.
   a. **Eval:** However, with world prices expected to continue falling, the industry may not be one with growth prospects. In addition, other economies such as China are gaining C.A. in milk production and thus Canada may find it difficult to compete with them.

Anti-thesis: There are reasons why protectionism may not be justified

1. **Breeds inefficiency in Canadian firms:** Similar to part (c), protection of the industry may instead breed inefficiency as the firms enjoy the benefits of the government's protection. This may result in these firm not innovating and thus not ever developing C.A.
2. **Higher prices and lower consumer surplus (Ext 2)**
   - **Eval:** Extent of ↑price may be significant due to tariffs being "sky-high" (Extract 2)
   - **Eval:** However, if there wasn't tariffs in place, the cost savings from cheaper imports may be absorbed by other some other part of the production chain (Ext 4) → prices may not be lower without tariffs.
3. **Welfare loss, Retaliation, World multiplier effect**

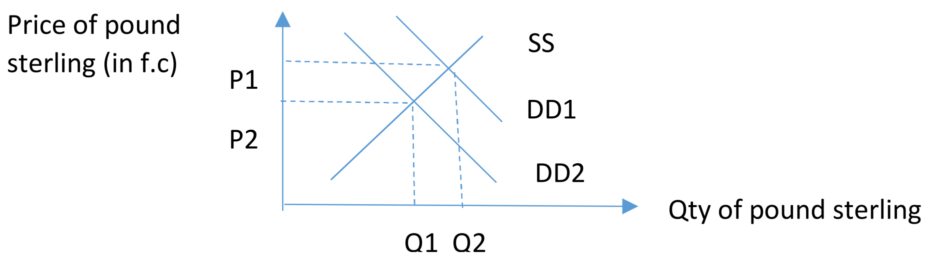
Conclusion

- **[Extent of benefits]** The benefits in providing time for the industry to develop may be limited as global competition in the milk markets is very intense with many existing large producers as well as growth of new producers in China. Canada may never be able to gain C.A. and export milk. In addition, the protectionism only serves to breed inefficiencies which further suggests why C.A. may never be gained by Canada.
- **[Extent of costs]** With "sky-high" tariffs, this suggests that the extent of the tariffs is very large. As a result, together with the fact that milk is a necessity and an important form of nutrition for many, the welfare loss and impact on consumer surplus may thus be very significant. In addition, the tariffs have negatively impacted the potential export revenue of many milk exporting countries such as US which has been pushing for access to the Canadian milk market (Ext 2). This may increase the chances of retaliation from trading partners. Overall, the costs may be significant.
- **Overall,** protectionism in the dairy industry is not justified as the costs would outweigh the benefits. However, there can be some consideration for protectionism in the short run for the industry to decline slowly, giving workers enough time to be retrained to find jobs in other industries that may be expanding in Canada.

Level	Knowledge, Application, Understanding & Analysis	Marks
L3	Responses in this level will give an analysis of various impacts of a price floor on Canadian households and firms.	7-8
L2	Responses in this level will give an analysis lacking in rigor or one lacking in scope.	4-5
L1	Responses in this level will be largely descriptive.	1-3

Meridian Junior College
H1 Economics 8819 Prelim

Case Study 2

(a)	**(i)**	**Explain the meaning of ‘real GDP’.**	**[2]**
		Real GDP refers to the monetary value of final goods and services produced within the country’s geographical boundary, adjusted for inflation.	
	(ii)	**Compare the growth rates of UK and Singapore from 2010 to 2016.**	**[3]**
		Any 3 comparative points: Possible Similarities: Real GDP growth rates in both UK & SG generally fell. Both UK & SG experienced positive growth rates over the period. Possible Differences: SG’s GDP growth rate fell more sharply than UK’s GDP growth rate. SG’s GDP growth rates is generally higher than UK’s GDP growth rate, except in 2015.	
(b)	**(i)**	**With the aid of a diagram, explain why the pound sterling depreciated following UK’s vote to leave the EU.**	**[3]**
		 UK’s vote to leave the EU → creates uncertainty → firms decrease demand for UK assets/ lower FDI (extract 5) → ↓DD for pound from DD1 to DD2 → surplus → downward pressure on price of pound from P1 to P2 → pound depreciates. [Alternative: ↑SS due to hot money outflow or FDI leaving UK]	
	(ii)	**Explain two reasons for an improvement in UK’s trade balance.**	**[4]**
		(1) Pound depreciates → ↓Px in f.c, ↑Pm in d.c → ↑(X-M) if the Marshall-Lerner condition holds (i..e PEDx + PEDm >1) (2) Global economy recovers (extract 5) → ↑real income → ↑DDx (assume normal goods) → ↑X→ ↑(X-M) [optional: An improvement in UK’s trade deficit → A fall in UK’s trade deficit → UK may need to borrow less and is thus living beyond its means to a smaller extent]	
	(iii)	**Comment on the impact of pound sterling’s depreciation on the UK government budget.**	**[4]**
		UK government budget refers to the difference between government spending (G) & government revenue (mainly tax revenue). If UK government’s spending > tax revenue → government budget deficit.	

Depreciation of the pound will reduce UK govt budget deficit
Depreciation of pound → ↑ UK's (X-M) if Marshall Lerner condition holds [extract 5 Sterling's marked weakening lifts exports]→ ↑AD→ ↑real income → ↑Tax revenue; As ↓UNN due to ↑AD → ↓G in the form of UNN benefits.
Overall, ↑T + ↓G→ ↓Govt budget deficit

Comment/EV: ↑G due to greater government foreign debt repayments as pound depreciates + ↓corporate income tax rates (& therefore ↓tax revenue) due to uncertainties (Extract 5) → UK budget deficit may rise instead.

(c)		**To what extent do you agree with the view that uncertainty about Brexit negotiations is only harmful to the Singapore economy? [6]**	[6]

Focus of Qn: Discuss harmful vs beneficial effects to the SG economy in addressing the question.

1. **Explain how uncertainty about Bexit neg may be harmful to SG economy**.

- Uncertainty about Brexit negotiations → ↓FDI to SG (Extract 6) → ↓AD → brief adj process → ↓ GPL, ↓real output → neg actual growth → consumers have lesser ability to purchase goods → ↓material standard of living (SOL).
- ↓ADL (derived DD) → ↑Demand-deficient unemployment (assume downward sticky wages) → ↓Non-material SOL. ↓Overall SOL.

EV: If Bexit drags down demand across EU (Extract 6), negative impact on SG might be more severe as EU, which is SG's second largest trading partner after China, experiences negative growth. SG's export revenue & FDI from EU may fall more significantly, which further worsens negative actual growth & demand deficient unemployment in SG.

2. **Explain how uncertainty about Bexit neg may benefit the SG economy.**

Uncertainty about Brexit negotiations → Pound Sterling depreciates → UK exports are cheaper in SGD → ↓price of imported raw materials from UK → ↓ unit COP for domestic firms such as Hart Technologies (Extract 6).
If many firms experience a persistent ↓unit COP due to lower imported prices of raw materials from UK → sustained AS →↓GPL→ lower imported inflation.
Rise in expected profits from investment→ ↑Investment spending → stimulates growth in SG

Conclude with reasoned judgement

Do not agree with the view that uncertainty about Brexit negotiations is only harmful to SG economy as there could be positive impact such as lower imported inflation for SG. However, the extent of lower imported inflation depends on factors such as the importance of UK imports to the SG economy.

[Note: Students can elaborate on any 2 macroeconomic impact for marks given. Linkages must be made to SOL if focusing on 1 impact]

Level	Knowledge, Application, Understanding, Analysis	Marks
L2	• A well-considered and balanced answer which demonstrates good analysis on whether uncertainty about Brexit negotiations is only harmful to the SG economy, supported by a clear criterion and relevant case materials to support economic analysis. • Links analysis on impact on SG economy to changes in SOL • Evaluation of arguments is done specific to SG context.	4-6
L1	• Lopsided answer that demonstrates insufficient rigour in analysis or scope. • Only explains how uncertainty about Brexit negotiations is only harmful OR not harmful to the SG economy, with reference to limited types of macroeconomic impact on SG economy. • Or considers both sides of discussion, but often lacking in rigour in explanation. • Insufficient use of case materials to support analysis.	1-3

(d) **Extract 7 highlights that a slow decline in Singapore's competitiveness is reflected through a smaller share of world exports and foreign direct investment.**

Discuss whether the Singapore government should prioritise raising labour productivity to enhance the economy's competitiveness. **[8]**

<u>Setting the context:</u>

- Decline in SG's competitiveness (signpost & extract 7) → <u>loss of Price/non-price competitiveness of SG exports, SG's competitiveness for FDI & foreign labour</u>

→ Smaller ↑X + ↑FDI in SG → slowing EG (Table1, Extract7)→ smaller improvements in material SOL→ SG government intervenes via supply-side policies to raise labour productivity (i.e. output per man hour.)

<u>Thesis: SG govt should prioritise ↑labour productivity to enhance SG's competitiveness</u>

Raising labor productivity could be achieved via education and training, which is a supply-side policy that leads to potential growth in the long run. The following are reasons why SG should prioritise ↑labour productivity to enhance the economy's competitiveness:

(1) Targets at a main cause of loss of SG's competitiveness i.e. high cost of production, high cost of living (Extract 7)

- Extract 7 highlights that productivity in SG has improved, but there is room for real growth in overall productivity
- Supply-side policies such as education & training raises labour productivity → <u>↑export price competitiveness, ↑ competitiveness for foreign talents</u> via ↓cost of living
- Eg. SkillsFuture → subsidies for education and training courses → encourages more workers to attend education and training courses → workers acquire more knowledge and skills → ↑productivity of workforce →↓unit COP if ↑labour productivity > ↑wages→ <u>↓Px (↑export price competitiveness)</u>. In addition, ↑productivity of workforce → ↑productive capacity of SG economy →↑AS → potential growth, ↓GPL (non-inflationary growth is achieved)→ ↓cost of living → <u>↑SG's competitiveness for foreign talents.</u>

(2) Advantages of Education & training

- Relevant types of education & training may reduce the lack of qualified engineers and managers in SG
- ↑labour productivity → ↓ unit COP → ↑expected profits from investment → <u>↑SG's competitiveness for FDI</u>
- Benefits of ↑FDI → actual growth → ↑material SOL.

EV: The greater the increases in labour productivity & FDI, the more significant will be SG's potential growth and hence, dampening of inflationary pressures. Relatively lower prices of SG exports will <u>boost SG's export price competitiveness</u> further.

<u>Linking statement</u> : However, the SG government needs to consider about the disadvantages of above supply-side policy to decide on its priority in policy decision making.

<u>**Anti-Thesis: SG should not regard ↑labour productivity as a key priority**</u>

SG should not prioritise ↑labour productivity to enhance SG's competitiveness due to these reasons:

(1) Disadvantages of Education & training

- Success of supply-side policies such as education & training can only be observed in the long run and are uncertain → depends on receptivity of workers. If workers are highly unreceptive towards learning new skills, then education & training may not be effective in raising labour productivity & enhancing SG's competitiveness.

Linking statement : Due to the disadvantages of education & training to ↑labour productivity, the SG govt may need to consider other more appropriate/effective policies to enhance SG's competitiveness.

(2) Other policies (not via ↑labour productivity) could enhance SG's competitiveness for goods/ FDI/ foreign talents

- Explain how an alternative policy works.

Example: Government promotes R & D (Product innovation) → Improve quality of products or create new products → <u>↑SG's non-price competitiveness of exports</u> → ↑DD for SG exports → ↑SG's export revenue.

[Other possible policies: Improving infrastructure, Devaluation/ Zero-appreciation of SGD]

EV: The more successful R & D is in influencing the tastes & preferences of consumers to raise the demand for SG exports, the stronger is SG's non-price competitiveness of exports.

Conclude with reasoned judgement

Whether the SG government should prioritise raising labour productivity to enhance the economy's competitiveness depends on the extent to which government efforts to raise labour productivity is likely to be effective in enhancing SG's competitiveness. As past significant efforts to raise productivity showed only slight improvement thus far (Extract 7), the SG government seems to face constraints in raising labour productivity through long term supply-side policies. In such a situation, the SG government should not prioritise on raising labour productivity to enhance SG's competitiveness, but consider the use of other policies (or a combination of policies) as discussed.

Level	Knowledge, Application, Understanding, Analysis	Marks
L3	• A balanced answer which well explains why the SG government should prioritise raising labour productivity to enhance Singapore's competeveness, supported by a clear criterion and relevant case materials to support economic analysis. • Addresses whether the SG government should prioritise raising labour productivity to enhance SG's competeveness which includes examining enhancing SG's competitiveness for both goods and FDI through raising productivity and one alternative policy. • Evaluation of arguments is done specific to SG context.	6-8
L2	• Lopsided answer that demonstrates insufficient rigour in analysis or scope. • Only explains how raising labour productivity should be a priority in enhancing SG's competiveness, without consideration of FDI and/or at least 1 other alternative policy which enhances SG's competitiveness. • Or considers both sides of discussion, but lacking in rigour in explanation. • Insufficient use of case materials to support analysis.	4-5
L1	• Largely descriptive with limited use of economic concepts.	1-3

Essay 3

(a) Explain how externalities can result in market failure. (10m)
(b) Negative externalities arising from production of a good gives rise to market failure. Discuss the extent to which price elasticity of demand for a good affects the appropriateness of using indirect taxation to correct this market failure. (15m)

(a)

Intro

Externality is a source of market failure. Market failure occurs whenever the price mechanism fails to allocate resources efficiently and equitably.

The existence of externality results in an inefficient allocation of resources as the market does not produce at MSB = MSC. Products are over-produced or over-consumed where there are external cost and under-produced or under-consumed where there are external benefit. In my essay, I will be explaining negative externalities in production and positive externalities in consumption and how they lead to market failure.

Development

Market for energy: Negative Externalities in Production
Negative externalities in production can be observed in the market for energy.

Identify and explain what are the negative externalities observed in the market for energy: There is the presence of negative externalities in production which are external costs that are incurred by third parties without compensation due to the production of energy. Examples of these negative externalities could be the air pollution due to the carbon emissions from the power stations. The pollution affects the health of third parties such as nearby residents by worsening their health through breathing difficulties. They thus incur higher medical costs and there might be income foregone if they are unable to go to work. These external costs are not compensated for by the power stations. The presence of the negative externalities in production will result in a divergence in the cost curves. This will cause the Marginal Social Cost (MSC) to be higher than Marginal Private Cost (MPC). There is no divergence in the benefit curve as there may not be any externalities in consumption present.

Establish the market outcome: The private costs to the firms will include the cost of production which is made up of costs of the coal needed to fuel the power station and rental of the space, labour costs. The private benefit to the consumers will be the satisfaction derived from being able to consume electricity as a result of the energy generation. The market, both consumers and producers, does not take into account the externalities and therefore only considers their private costs and benefits. Hence, with reference to Figure 1A, the market equilibrium occurs where demand equals supply, E1 with an output at Q.

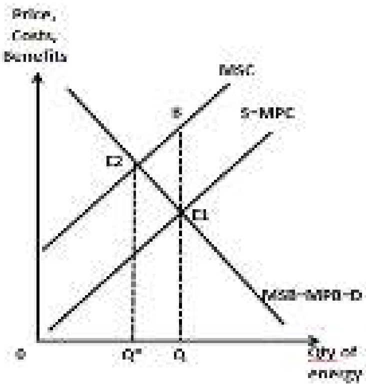


Fig 1: Negative Externality in Production

Explain where and what is the socially ideal outcome: However, society's welfare is maximised at point E2, where MSB=MSC. Producing one more or one less unit than the socially optimal output at Q* will result in a fall in society's welfare. For example, if output is at Q which is more than Q*, the additional cost to society (QB) is greater than the additional benefit to society (E1Q). Society can do better by producing fewer units.

Explain the overallocation of resources and identify the resulting deadweight loss: There is thus an overproduction and overconsumption of energy by Q*Q, causing the society to incur a deadweight loss of E1E2B which means that society's welfare is not maximised. This means that there is an overallocation of resources in the energy market and thus, resulting in allocative inefficiency. There is market failure observed as not the right amount of the right type of goods is produced.

When the market fails, the governments may need to intervene to provide a non-market mechanism to correct the allocation of resources.

<u>Market for vaccines: Positive externality in consumption</u>

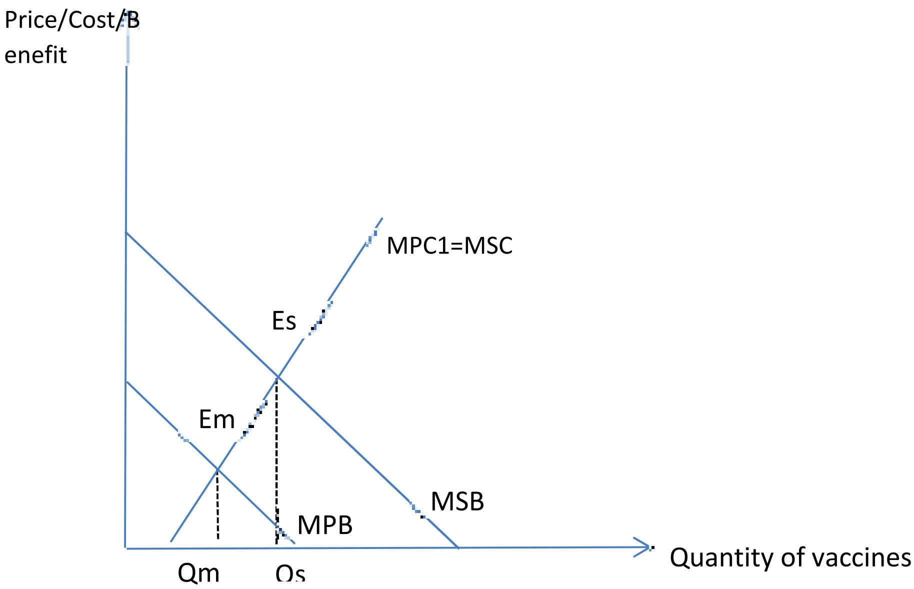


Fig 2: Positive Externality in consumption

Vaccines is an example of good that exhibits positive externalities in consumption. There are benefits accruing to third parties. In the case of vaccines, an individual who chooses to consume a flu vaccine will reduce the chances of other people around him (third parties) to fall sick and they will in turn, be more productive and this translates into higher profits to the firms they are working in. However, because the individual will not take into consideration these external benefits in his consumption decisions, the social benefit of vaccines exceeds private benefit. (MSB>MPB)

Thus, QmQs amount of goods are under-demanded and under-consumed. This leads to allocative inefficiency and the market fails.

Conclusion

Under such circumstance, arguments in favour of government intervention are put forward to correct the market failure.

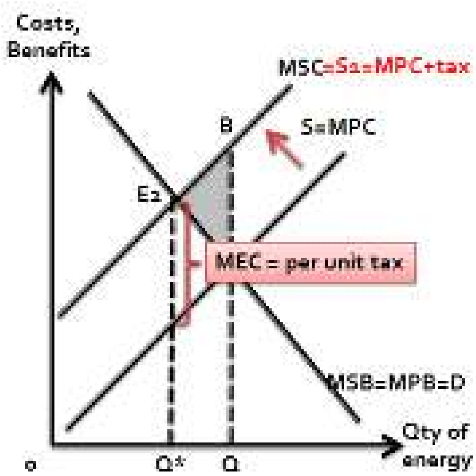
Knowledge, Understanding, Application , Analysis		
L3	Clear analysis with the aid of diagrams to illustrate how the two examples of externalities may lead to market failure	7-10
L2	Undeveloped analysis of how externalities might lead to market failure.	5-6
L1	For an answer which shows some knowledge of what externalities but is largely unexplained.	1-4

(b)

<u>Intro</u>

As negative externalities in production gives rise to market failure, taxes, which is a market based policy would be one the policies that the government will implement to reduce allocative inefficiency and bring about a more efficient allocation of resources. In my essay, I will discuss factors like PED, availability of information and the unintended consequences which will affect the appropriateness of the taxation policy.

Development 1: Explain how taxes work to correct the market failure



arket

A carbon tax will involve levying a specific tax per unit of carbon emitted by firms.

It would lead to firms internalising the external cost and will increase the unit cost of production of generating energy. This would mean that at each output level, firms would require a higher price to be willing and able to supply a particular quantity of energy. The supply curve will shift leftwards from S to S1 as shown in the diagram reducing the overproduction of energy.

With reference to Fig 3, if the government correctly sets a per unit tax equivalent to the marginal external cost, this will mean that the supply curve (MPC) shifts such that the new market output will now be at Q*, which is the socially optimal output. Because firms now internalise the external cost, the correct amount of the good is produced and there is now allocative efficiency with the deadweight loss eliminated.

Development 2: Explain the factors affecting the appropriateness of taxes

1. PED

Effectiveness of indirect taxation to correct market failure does depend on PED. Imposing a tax will reduce supply which will increase the price of energy. Given that the good, which in this case is energy, is a necessary input to generate electricity, heat, industrial purposes etc, the PED value will be <1. Thus, given an increase in price, quantity demanded will fall less than proportionately as compared to when PED>1, quantity demanded will fall more than proportionately.

In order for the tax to be effective, a larger amount of tax will be needed to reduce the production of energy to the socially optimum output level.

Hence, the PED value of the good does affect the effectiveness of a tax and it works better if PED>1. If not, a larger tax will result in lower income households having lesser access to the good and lesser allocation of resources will be allocated to them, and more to the higher income households, leading to greater income inequity.

EVALUATION: However, although PED may affect the effectiveness of indirect taxation, government may still use it due to its benefits. Higher indirect taxation can enable the government to generate more tax revenue which can be used by government to subsidise R&D efforts to solve to the problem of negative externalities further. For example, tax on greenhouse gases can be used to subsidise R&D efforts to promote greener forms of energy which will lead to less carbon emission. In addition, in case of goods that have price inelastic demand (e.g. provision of air travel services by airlines) government can complement the policy of indirect taxation with other policy such as education efforts (e.g. campaigns to discourage domestic air travel and switch to other modes of transport) to make the demand for the good more price elastic so as to increase the effectiveness of indirect taxation.

2. Availability of information

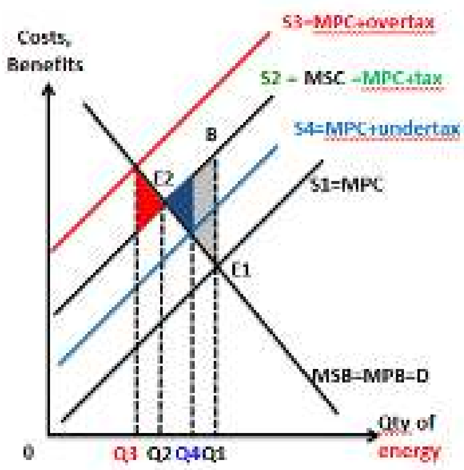


Fig 4

Secondly, it is difficult to determine the negative externalities in monetary terms due to lack of appropriate measuring device and non-quantifiable and long-term impact of the negative externalities (e.g. lack of measuring device for different types of pollutants, negative environmental effect of air pollution produced by power plant). Hence, the government may end up over estimating the amount of tax to impose. This may reduce the market equilibrium output to be less than the socially optimal output which will be at 0Q3. This creates a greater deadweight loss than before. The overcorrection by the government has created a new problem of underproduction (Q3Q2) which is again allocative inefficient.

EVALUATION: However an inaccurate measurement of tax will not always lead to a worse outcome. In the case of under-taxation, where a unit tax less than MEC is imposed, the supply curve will shift to *MPC+undertax*. Although the market failure is not completely corrected, the extent of the overproduction is now reduced (Q2Q4 < Q2Q1) and society's welfare has improved.

3. Unintended consequences

Energy is a factor input in many production purposes, hence, a tax on energy will lead to unintended consequences such as reducing the economic growth of an economy. Tax on energy will result in many firms experiencing an increase in their unit cost of production, leading to profitability per unit of their good to fall. Hence, they will reduce their supply of goods and causing the price of goods in an economy to increase. This will reduce aggregate supply, causing general price level to rise and real output to fall.

Conclusion

In conclusion, the role of PED in affecting the appropriateness of taxes is to a limited extent as there are other factors as discussed above which will affect the appropriateness of taxes as well. The most important factor will depend on the government's objective. If the government prioritizes equity, then PED will be the most influential factor because the government will only impose a smaller tax if the good has a PED value of <1 so as not to worsen income inequity.

Knowledge, Understanding, Application , Analysis		
L3	For an analytical discussion of several factors that will affect the appropriateness of taxes.	9-11
L2	For an undeveloped explanation of PED and other factors.	6-8
L1	For an answer which shows some knowledge of taxes.	1-5
Evaluation		
E2	For an evaluative discussion that considers which factor is the most influential.	3-4
E1	For an unexplained judgement, or one that is not supported by analysis.	1-2

Essay 4

(a) **Explain why governments aim to achieve a low and stable inflation. (10m)**
(b) **Discuss the view that the Singapore government should use exchange rate rather than interest rate to achieve price stability. (15m)**

Part (a)

Intro

Inflation is defined as a period of sustained and inordinate increase in the general price level. It is measured by the annual percentage change in the consumer price index. One of the objectives of the government is to attain a low and stable rate of inflation. In general, most countries set an inflation rate target of 2-3%. Governments want to keep the inflation rate low because a high and uncertain inflation rate has adverse effects. This essay will aim to discuss the negative impacts.

Development: Explaining the consequences of not achieving a low and stable inflation

Inflation has both internal and external impacts on the economy.

- Arbitrary redistribution of income

Assuming a progressive tax structure, inflation pushes taxpayers (individuals and corporations) into higher marginal tax brackets when nominal income rises. As a result, they have to pay a larger fraction of their income in taxes. Hence, the gainer is the government and the loser the taxpayers.

Consider for e.g. a tax system in which we pay no income tax if our annual income is below, $4000; we then pay a tax of 25% for next $20 000 and then at 40% for the rest of the income. Income tax paid by someone earning $60 000 per annum would be $19 400 which 32.2% of their income.

Now assume inflation occurs and price level doubles. Incomes double too, so that the $60 000 becomes $120 000- remember all prices have doubled so the real value of this pre-tax income has not changed. The income tax paid now, however will be $43 400 which is 36.2%. Thus, the tax we pay simply increases as a result of inflation, even when there is no change in the structure of tax rates or in our real pre-tax income.

- Consumers' real income will fall

With inflation, savers lose because the real value of savings falls hence purchasing power of saving deteriorates. Though most forms of savings earn interest, the value of one's savings will still decline if the rate of inflation exceeds the nominal rate of interest (i.e. the real rate of interest is negative). People may be discouraged from savings, leading to an increase in consumption, ceteris paribus.

Real interest rate = nominal interest rate – inflation rate

However, people who are risk-averse may increase their savings in order to maintain the real level of savings as well as to prepare for uncertainty. If this is so, then savings will increase and consumption will fall. This will reduce their material SOL as they can spend lesser on goods and services.

- Production, Employment and Investment

Cost-push inflation will reduce production, employment and investment. In the case of cost - push inflation as shown in Figure 5, the leftward shift in SRAS curves will cause employment, income and output to fall(from Y1 to Y2 to Y3). This is because firms which cannot absorb the higher factor prices might find it difficult to survive. With no excess demand, these firms are unable to pass on the higher cost to the consumers. As firms cut back on production instead, demand for labour falls hence increase unemployment.

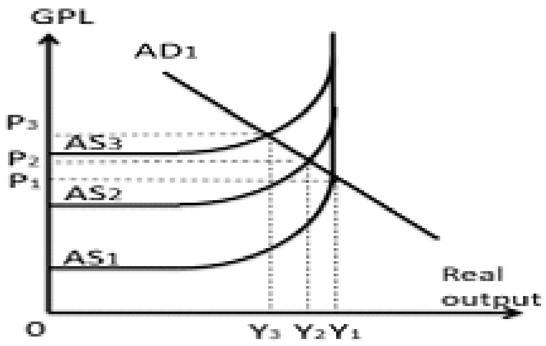


Fig 5: Cost Push inflation

- Economic Growth

If inflation is cost-push, firms will cut back on production and investment. A fall in investment expenditure will cause AD to fall hence resulting in a fall in output, employment and national income by a multiplied amount.

Unexpected inflation hinders growth by introducing uncertainty. When households are unsure of the future value of their savings, they will have less incentive to save. Thus, funds available for investment will decrease, hence a fall in investment volumes. With more firms and households competing for funds, interest rates may increase as the cost of borrowing becomes higher. This will further discourage consumption and investments. Hence, a fall in AD will cause negative economic growth. This will reduce GDP and reduce the citizens' SOL.

In addition, when firms are uncertain about the future prices of their products and hence the rates of return on their investments, they will be less willing to take risks and invest, especially in long-term projects. Instead, both households and firms may be preoccupied with short-term, unproductive speculative activities such as buying and selling properties which tend to yield attractive returns in an inflationary environment. Such activities do not benefit the economy but only fuel an unsustainable rise in property prices. Exaggerated expectations of gains from investing in properties will encourage people to borrow excessively to finance their investment. This can lead to instability in the banking system when property prices eventually collapse and borrowers default on their loans. The Subprime mortgage crisis experience in USA in the 2007/2008 is an example.

However, as mild and demand-pull inflation increase profit margins, investment will be stimulated resulting in economic growth.

Conclusion

Achieving a low and stable inflation is definitely important as it helps to achieve internal stability in SG. The effects will be more severe when inflation is unanticipated and last for a long time.

Knowledge, Understanding, Application , Analysis		
L3	For an accurate and well-developed analysis of how inflation can be harmful to an economy.	7-10
L2	For an undeveloped analysis of the consequences of inflation	5-6
L1	For an answer which shows some knowledge of inflation.	1-4

(b)

Introduction

Exchange rate and interest rate are monetary policy tools which a government can use to achieve macroeconomic objectives. Whether the problem could be solved by any policy depends on whether the policy was effective and appropriate.

Thesis Development 1: Exchange Rate Policy

How exchange rate policy works:

Governments of small, open economies that operate a fixed exchange rate system or a managed float exchange rate system may appreciate/revalue the exchange rate to reduce imported inflation. This is because SG is a resource poor country and we often have to import a lot of inputs (raw materials) in our production processes and consumer durables. When the Singapore government appreciate/revalue the exchange of the Singapore dollar (SGD) it can lower inflation rate by lowering imported inflation in three ways. Firstly, a rise in the external value of SGD will make imports cheaper in SGD. A fall in the price of imported raw materials puts downward pressure on the price level by lowering the costs of production, reducing the price of finished imports. Secondly, the price of imported finished product will also be lower in SGD. Finally, lower imported prices means there is more competitive pressure on domestic firms to keep their prices low. This will help to reduce cost push inflation.

Exchange rate helps to reduce demand pull inflation as well. Initial real output is at Y1. Assuming the M-L condition holds (PEDx+PEDm>1), net exports will fall, reducing AD.When aggregate demand decreases from AD1 to AD2, at the original price P1, total demand in the economy is less than total supply. There is a surplus AE1 of goods and services produced. This results in the downward pressure of prices and a build-up of firms' inventories. As prices fall, firms in the economy produce fewer goods and services and aggregate quantity supplied fall. At the same time, lower prices will cause economic agents to increase expenditure and aggregate quantity demanded rises. This occurs until there is no more surplus of goods and services in the economy. Inventories return to the level planned by the firms. At the new equilibrium, general prices decrease from P1 to P2, real output falls from Y1 to Y2.

Hence, the fall in AD from AD1 to AD2 reduces inflationary pressure from P2 to P1.

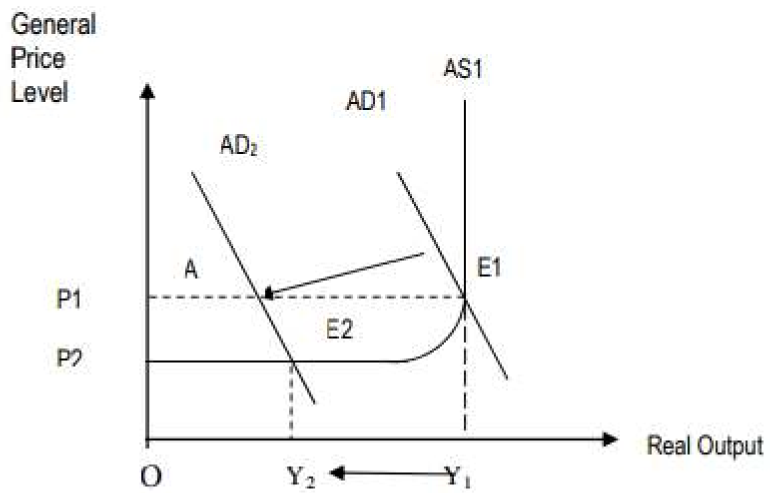


Fig 6

Advantages:

(i)Effective due to nature of SG economy

Singapore is very open and trade reliant as our external demand consists of 75% of our total demand , hence we depend heavily on its trading partners for growth (export-led growth). As such the appreciation of its exchange rate would have significant impact at the macro-level as such appreciation would ↓AD to a large extent thus reducing inflation effectively.

In addition, exchange rate tackles the other root cause of inflation in Singapore, imported inflation. Due to Singapore's lack of natural resources, the country is susceptible to imported inflation.

Therefore, exchange rate policy is effective in reducing inflation in SG.

Evaluation: Interest rate policy however, targets more of internal demand (Cd and I) and is less effective in reducing demand pull inflation. Also, it is unable to reduce imported inflation which SG commonly faces.

(ii) Appropriate due to nature of SG economy

Being a financial hub, SG encourages free capital mobility and because of this, exchange rate policy would be more preferred. If SG were to use interest rate policy to influence inflation, it may create more volatility. For example, if SG is facing inflationary pressures now, we will need to raise interest rates.

However, an increase in i/r will result in hot money inflow into the country, which may fuel more inflation. Singapore does not choose to target interest rates because managing the interest rates will result in large inflows and outflows of speculative capital, resulting in instability of Singapore currency. This adversely affects export competitiveness and price stability and adversely affects her comparative advantage in the export sectors

Using a gradual appreciation policy stance will instead help to strengthen and stabilize our currency to instil greater confidence in our economy.

Disadvantages:

The appreciation of Sing dollar does not come without cost to the economy. Besides making our exports less price competitive, it also encourages imports of goods and services. Net exports will fall and this will worsen Singapore's BOT position. In addition, there is a limit to which Sing dollar could rise beyond which our export-driven growth will be seriously affected.

<u>Anti-Thesis 1: Interest Rate Policy</u>

How interest rate policy works:

A rise in interest rates reduces inflationary pressure by reducing AD.Interest rate is both the cost of borrowing as well as the returns to savings. When interest rates increase, cost of borrowing increases, thereby decreasing the consumption of housing and other consumer durables like cars and houses which is usually financed from borrowing.

With consumers paying more for their loans that have variable interest rates, they have less left for spending on other goods and services. On the other hand, higher interest rates also mean more incentive to save as the returns to savings is higher. The opportunity cost of consumption increases. Hence, consumption expenditure (C) decreases.

A rise in interest rate raises the cost of borrowing. The number of profitable Investment projects will fall decreasing the firms' incentive to invest. Investment decreases. Since Cd and I fall, AD will fall, reducing GPL and hence demand pull inflation.

Advantage:

(i)Effective for countries who depend on internal demand

Interest rate policy works better for economy which relies on internal demand (e.g. China, USA) as it targets Cd and I which helps to reduce demand pull inflation more effectively. Hence, it is not very effective in SG's context due to our small internal demand.

<u>Conclusion</u>

Hence, it does not help to target the root cause of inflation in SG. Exchange rate policy is definitely a more effective policy in reducing both imported and demand pull inflation in SG. Due to the impossible trinity, SG has chosen to opt for free capital flows and thus, exchange rate policy will be a more appropriate tool in SG as it brings about less unintended consequences.

Knowledge, Understanding, Application , Analysis		
L3	For an analytical discussion of both policies and how it works to reduce demand pull and cost push inflation and both the pros and cons for each policy.	9-11
L2	For an undeveloped explanation of both interest and exchange rate policy with some discussion of either the pros and cons of the policies.	6-8
L1	For an answer which shows some knowledge of exchange rate policy.	1-5
Evaluation		
E2	For an evaluative discussion that considers the pros and cons of both policies and come to a reasoned judgement which policy is the preferred choice in SG.	3-4
E1	For an unexplained judgement, or one that is not supported by analysis.	1-2