VICTORIA JUNIOR COLLEGE
JC2 PRELIMINARY EXAMINATION 2018
HIGHER 2

H2 ECONOMICS **9757/01**

Paper 1 **2 hours 15 minutes**

Additional Materials: Answer Paper

READ THESE INSTRUCTIONS FIRST

Write your name and class on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use an HB pencil for any diagram or graphs.
Do not use staples, paper clips, highlighters, glue or correction fluid.
DO **NOT** WRITE IN ANY BAR CODES.

Answer **all** questions.

Start each question on a FRESH piece of paper.

At the end of the examination, fasten your work securely, <u>by question</u>, <u>using the strings provided.</u>

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

This document consists of **7** printed pages

[Turn over

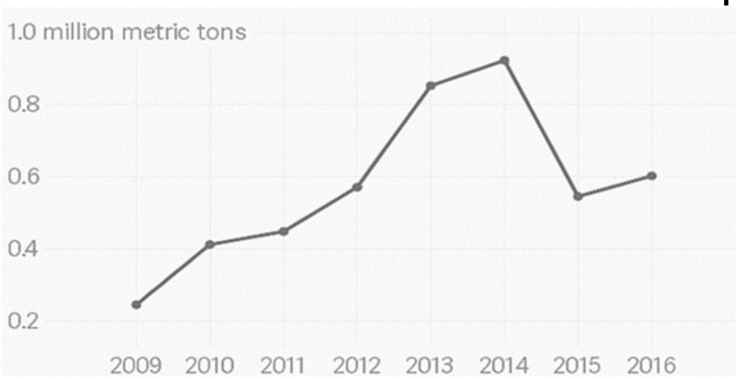
Answer **all** questions.

Question 1: Infant Formula Milk

Figure 1 – Singapore Infant Formula Milk Prices (S$ per 900g tin)

Source: Singapore Department of Statistics

Figure 2 – Volume of China's Infant Formula Milk Import



Source: Dairy Association of China

Extract 1: Fear of tainted infant formula milk in China

Ten years after China's infant formula milk tragedy, parents still won't trust their babies with local formula. The national disaster took the lives of six infants and sickened more than 300,000 babies in China. The chemical compound called melamine, used in plastic and fertilizer production, had made its way into infant formula milk; shattering the confidence of people in Chinese-made infant formula milk; and in the entire local food supply.

Parents in China have been paying double to buy infant formula milk from Singapore, and are willing to pay up to S$200 to have the product couriered to their home as they believe the products from Singapore are of higher quality.

Adapted from Asiaone.com, Feb 2018

Extract 2: Rising prices of infant formula milk

Infant formula milk prices in Singapore have more than doubled over the last decade to become among the highest in the world. Parents remain loyal to their chosen brands of milk powder even as the average price of infant formula milk continues to rise. They are willing to spend on good-quality infant formula milk because infant formula milk constitutes the sole source of nutrients for their young child if breast milk is not available. Moreover, infant formula milk is a short-term spending item. As a result, they are willing to incur high expenses in the short-term to buy good quality infant formula milk.

Adapted from The Straits Times, 8 Feb 2018

Extract 3: Government steps in to regulate the infant formula milk market in Singapore

According to the Competition Commission of Singapore (CCS) study, new entrants into the infant formula milk market will find it extremely difficult to convince parents that they are similar or even superior to other brands within their decision pool, especially given the market power and branding that the incumbents currently enjoy. New entrants will not be able to compete with the incumbents as the latter invest heavily on research and development so that they can introduce new infant formula milk products with modified formulations or packaging.

The aggressive marketing and promotion campaigns of the incumbents like Nestle, Abbott and Mead Johnson which holds 72% of Singapore market share, tend to encourage parents to make bulk purchases. In addition, they also invest a disproportionate share of their marketing expenditures on hospitals. These brands of infant formula milk being placed as the default brand in the hospital wards helps to expose the brand to new parents. Securing such customers at the very beginning of their parenting journey was critical to reinforce their brand loyalty.

To encourage more competition, the Singapore government will also simplify and streamline import requirements as well as remove unnecessary barriers to entry in order to bring in more options for parents without compromising food safety. Regulations to curb excessive marketing and encourage greater price competition have also been amended to prohibit health and certain nutrition claims by infant formula milk manufacturers, as well as texts and images that idealise the use of infant formula milk in Singapore.

Consumer education is also key. The Health Promotion Board (HPB) has recognised the lack of awareness around infant formula milk where some parents were unaware that infant formula milk can be stopped after the age of one. A multi-year marketing programme by HPB will also cover the nutritional composition of infant formula milk to help parents make more informed decisions.

With an increase in consumer awareness and the availability of more affordable infant formula milk options, prices should become more affordable. However, it will take time for consumer behaviour to shift, and for the market to react accordingly.

Adapted from Competition Commission of Singapore, 10 May 2017

Extract 4: Australia to cash in on China's infant formula milk boom

Australia's reputation as a producer of high-quality foods is a blessing for Australian infant formula milk producers. A free trade deal between Australia and China could set Australia up to take advantage of China's addiction to Western milk powder. There are tariff savings, investment opportunities, more exports and more profit. With the trade deal, the current 15% tariff China imposes on Australian infant formula milk is set to be phased out within four years.

The China infant formula milk market is potentially "a massive opportunity" for capable Australian infant formula milk companies, especially given the baby boom stemming from the relaxation of China's one-child policy and the growing spending power of China's growing middle class. The rise of the Internet and social media in China is also playing a role, making it easier for Chinese consumers to buy their preferred infant formula milk via e-commerce websites.

But it's not all milk and honey. There are thousands of infant formula milk companies in China so it is a very competitive space. The market is serviced by international brands with deep pockets and vast experience. The infant formula milk scandal has also prompted the Chinese government to implement stricter regulation for baby formula food. The ingredients, food additives, formula and labels of baby formula food must be recorded and registered with the China Food and Drug Administration (CFDA).

Adapted from BBC, 14 January 2015

Questions

(a) **(i)** Using Figure 1, compare the change in infant formula milk prices for the periods 2007 to 2014 and 2014 to 2017. [2]

(ii) Explain whether the data in Figure 2 is able to support the observed change in infant formula milk prices for the period 2007 to 2014. [4]

(b) What can you conclude from the evidence in Extract 2 about the price elasticity of demand for infant formula milk? [2]

(c) With reference to the data, justify the market structure for the infant formula milk market in Singapore. [4]

(d) Discuss the factors Australian infant formula milk companies are likely to consider when deciding whether to enter the Chinese infant formula milk market. [8]

(e) To what extent can the measures adopted by the Singapore Government mentioned in Extract 3 increase the affordability of infant formula milk for Singaporeans? [10]

[Total: 30]

Question 2: Brexit Consequences for the UK & Singapore

Table 1: UK Consumer Price Index & Labour Productivity (annual % change)

	2013	**2014**	**2015**	**2016**	**2017**
Consumer Price Index	2.3	1.5	0.4	1.0	2.6
Labour Productivity Growth	0.6	1.8	-0.1	1.4	0.3

Source: Office for National Statistics, UK

Table 2: Economic Indicators in Singapore & UK (% of GDP)

	Singapore		**UK**	
	2016	**2017**	**2016**	**2017**
Gross Savings	46.2	48.1	11.8	13.2
Exports of Goods and Services	168.2	173.3	28.3	30.5
Import of Goods and Services	142.1	149.1	30.3	31.9
Government Budget Balance	-1.2	0.3	-0.4	0.1

Source: MAS, World Bank

Extract 5: Pound sterling slumps with news of Brexit

Uncertainty over the outlook of the UK economy after the Brexit vote (Britain's vote to leave the European Union (EU)) in June 2016 has sent the pound sterling plummeting to levels not seen since the 1980s. However, the sharp fall in the pound sterling has yet to bring about the expected improvement in the trade deficit.

A year after the sharp depreciation of the pound sterling, household spending growth has virtually stalled. It was a response to the squeeze on living standards caused by the sterling-induced jump in the cost of living.

Meanwhile, net trade did not contribute to growth in the three months from April 2017 to June 2017. Britain is now the slowest growing economy in the G7 courtesy of weak investment, cautious consumers and its failure to exploit the opportunity afforded by the pound sterling's depreciation. Some attributed the flat growth in net trade to the time lags arising from importers and exporters having to honour pre-existing contracts.

Adapted from The Guardian, 24 August 2017

Extract 6: UK economy slips down competitiveness ranking

Competitiveness of an economy can be considered from three perspectives – export competitiveness, attractiveness as a Foreign Direct Investment destination, and labour competitiveness.

The World Economic Forum's (WEF) annual competitiveness index ranked the UK as the eighth best economy in the world, down from seventh last year. Experts are warning that

Brexit could see the country slip further. The WEF said Brexit is "likely to further undermine the country's competitiveness" in future.

The organisation has previously warned that Brexit is likely to have negative effects on the UK in both the short and long term. In the short term, prior to any changes to the law, increased uncertainty will reduce investment, consumption, and foreign trade as consumers and investors become more cautious. Beyond that, the UK is likely to face the full negative impact of a lack of access to the single market, which will increase the cost of trade, investment, and the movement of labour, all of which will eventually be reflected in the economy's overall efficiency.

Adapted from The Independent, 27 September 2017

Extract 7: Staying competitive amidst Brexit

According to the British Chambers of Commerce (BCC), the biggest challenges facing businesses in the UK are to do with "fundamentals" rather than Brexit. "The best possible Brexit deal will not matter to the UK's competitiveness if the roads remain potholed and congested, if you can't get mobile phone coverage around the UK, if business broadband is poor and companies can't get the people they need because the training system isn't working to deliver for them," says Adam Marshall, the director general of the BCC.

Policy makers have wrestled with low UK productivity growth since the financial crisis in 2008. The UK is also one of the most unequal developed countries in the world and reports suggested that the rising income inequality was a key factor that contributed to the UK's vote to leave the EU.

The UK government said it was committed to its Industrial Strategy, a long term plan to boost the productivity and earning power of people throughout the UK. In addition, its £1.7bn Transforming Cities Fund which aims to improve productivity through investment in transport infrastructure will address weaknesses in city transport systems, improving connectivity and reducing congestion.

The negative impact of Brexit on UK's competitiveness may push the UK to be more aggressive in its tax offer. Corporate tax in UK is currently at 19% and due to be cut to 17% by 2020. UK's Prime Minister Theresa May has suggested that it could be lowered further in an effort to encourage businesses to invest in Britain.

Adapted from BBC, 8 March 2018

Extract 8: Brexit and Singapore

Brexit isn't bad news for everyone in Singapore. Companies like Hart Technologies, a Singapore-based dealer of fire protection equipment who imports products from the UK will benefit from the pound sterling's sharp drop against the Singdollar.

But the pound sterling's volatility cuts both ways. In the near term, the pound sterling's free fall against most currencies is expected to hurt Asian exporters with strong exposure to UK markets, or with earnings denominated in pound sterling. But that is broadly manageable unless Brexit drags down demand across the EU as well.

Economists are also concerned that Singapore's overall economy will be affected if British companies here start to pull back on investment in manufacturing due to the weaker pound sterling against the Singdollar. That in turn, could also have a knock-on effect on local support services like advertising, business and professional services, and financial services.

Britain is No. 22 on the list of Singapore's trading partners - its non-oil domestic exports to Britain account for less than 1 per cent of total shipments, while imports from Britain constitute about 2 per cent of Singapore's total imports.

Adapted from The Straits Times, 29 June 2016

Questions

(a) Describe the change in consumer prices in the UK between 2013 and 2017. [2]

(b) Explain how the ‘squeeze on living standards’ of UK households could be caused by the ‘sterling-induced jump in cost of living’ (Extract 5). [3]

(c) Explain possible reasons why the UK trade deficit did not improve despite the depreciation of the pound sterling. [4]

(d) With reference to Table 2, explain how you would expect the size of the multiplier to differ between the UK and Singapore. [3]

(e) Discuss the possible consequences of Brexit on households and firms in Singapore. [8]

(f) Assess the measures the government should adopt to address the loss of competitiveness in the UK. [10]

[Total: 30]

------ End of paper ------

Suggested answers to 2018 VJC H2 Prelims Paper 1

Question 1

a.	**i)**	**Using Figure 1, compare the change in infant formula milk prices for the periods 2007 to 2014 and 2014 to 2017.** Infant formula milk prices **increased in both periods**. (1) Infant formula milk prices **more than doubled** from 2007 to 2014; while it **rose by only about 10%** for 2014 to 2017. (1)	**[2]**
	ii)	**Explain whether the data in Figure 2 is able to support the observed change in infant formula milk prices for the period 2007 to 2014.** Given the data in Figure 2, there is a positive correlation between rising infant formula milk prices and rising import of infant formula milk in China. (1) This could suggest that China could have been importing from Singapore, leading to an increase in demand creating a shortage there. Hence, the rapid rise in prices of infant formula milk over this period. (1) Figure 2 is insufficient because there is no clear data on the source of the China's infant formula milk imports. Despite evidence from Extract 1 that Chinese parents were willing to pay double for these products from Singapore, China could have also imported the infant formula milk from other countries like Australia. (2) OR Figure 2 alone is not able to fully support the observed change in infant formula milk prices. In addition, price changes could arise from supply factors and not only from changes in demand. Thus, information on the supply of infant formula milk China and Singapore is needed. The rapid rise in price could have been due to a fall in supply of infant formula milk in Singapore. (2)	**[4]**
b.		**What can you conclude from the evidence in Extract 2 about the price elasticity of demand for infant formula milk powder?** From Extract 2, it can be inferred that the demand for infant formula milk powder is likely to be highly price inelastic given that parents continue to demand infant milk powder due to the perceived lack of close substitutes as they 'remain loyal' despite the huge increases in price. (2) *Also accept demand for infant formula milk powder is perfectly price inelastic if explained clearly – infant milk powder is the only available substitute for infant milk powder is breast milk. Lack of other close substitute available suggests demand for it is perfectly price inelastic for those who cannot breast feed.*	**[2]**
c.		**With reference to the data, justify the market structure for the formula milk market in Singapore.** It is an **Oligopoly** market structure, dominated by a **few dominant sellers** as seen in Extract 3, where Nestle, Abbott and Mead Johnson constitute 72% of the total market share in Singapore. Such dominance implies strong market power for firms in this industry. (2)	**[4]**

		In addition, the **high barriers to entry (BTE)** is also a characteristic of oligopoly market structure. Extract 3 mentions that such firms aggressively advertise which may result in high brand loyalty for the incumbent firms' goods. In addition, the heavy investment in R&D in order to develop better and newer products will result in high start-up costs that require new entrants to produce at a higher output level in order to reap the large economies of scale. These strategies create high BTE, limiting the ability of new firms to enter and compete, which in turn gives firms in this industry strong market power. (2)	
d.		**Discuss the factors Australian infant formula milk companies are likely to consider when deciding whether to enter the Chinese infant formula milk market.** **Intro:** Assuming that Australian infant formula milk companies **aim to maximize profits,** they will consider factors that affect their **total revenue (TR)** as well as **total cost (TC)** when deciding whether to enter the Chinese market. **Body**: **Australian infant formula milk companies are likely to consider the potential size of the Chinese market as it affects the firm's revenue.** [C, E] Australian firms will be able to capitalize on the reputation of Australia as a producer of high-quality food (Ext 4). This will cause the DD for Australian infant formula milk to rise; particularly following the stigma of infant formula milk scandal (Ext 1); existing consumers may switch to milk powder produced in Australia as a result. This rise in demand will increase the expected revenue for Australian infant formula milk companies. Given the relaxation of China's one child policy (Ext 4 para 2), there would also be a rise in DD for infant formula milk as more children are born in China, increasing the expected revenue for Australian companies. As Chinese households become affluent (Ext 4 para 2), income and hence their purchasing power increases, enabling them to afford premium infant formula milk, increasing the demand for infant formula milk and the firms' expected revenue. These factors above are likely to affect the expected demand for Australian infant formula milk and hence the potential size of the infant formula milk market in China, which will in turn impact Australian firms' expected total revenue. **Australian firms are likely to consider the level of barriers to entry of Australian-produced infant formula milk to the Chinese market.** Governments can put up artificial barriers to entry in the form of food regulations or import tariffs. The free trade deal between China and Australia will bring about a tariff saving of 15% as it is phased over 4 years (Ext 4). This reduction in tariff will lower the price of Australian-produced infant formula milk in the Chinese market. If the firms pass on the cost savings (from tariff elimination) to consumers, it will result in a fall in the price of Australian infant formula milk. The resulting rise in quantity demanded is likely to be more than proportionate to the fall in price given that demand for Australian infant formula milk is likely to be price elastic (i.e. PED > 1) because of the large number of available substitutes, resulting in higher revenue reaped by the Australian firms.	**[8]**

However, entering the Chinese market may also mean higher cost due to the need to adhere to stricter regulation following the infant formula milk scandal (Ext 4). These measures may increase the administrative cost of importing of Australian-produced infant formula milk as they need to adhere to these regulations.

Australian firms may also consider the potential cost savings from reaping EOS by selling in the Chinese infant formula milk market.
[C, E] By expanding into the Chinese market, Australian firms will be able to produce a larger output given the size of the Chinese market, enabling it to reap greater economies of scale e.g. marketing economies of scale through the bulk purchases of factor inputs to produce infant milk powder. Increasing economies of scale will enable firms to lower their average cost of production.

The rise of internet and e-commerce have also changed tastes & preferences amongst consumers who prefer to buy online instead of physical stores. This will lower the cost of selling in the Chinese market as there is no longer a need to incur significant fixed costs in the form of rentals to set up physical stores to access the Chinese market.

Evaluation/Conclusion:
In deciding whether to enter the Chinese market, Australian infant milk companies will need to weigh the expected revenue and costs of entering the market. Given that the market is an oligopoly market structure (Ext 3), there is mutual interdependence and rivals' actions are likely to affect the extent of the changes in revenue and costs, hence firms will also have to consider the perspectives of current incumbent firms. For example, while there may be potential EOS to be reaped in selling to a larger market, the extent of the EOS may be limited given the competition from the numerous sellers in China (Ext 4 para 3). The deep pockets and vast experience of the incumbent firms also suggest that there is a high possibility of aggressive advertising and other entry deterrence strategies. Hence, the intensity of competition will be a key consideration that should also be factored in when weighing the costs and benefits of entry.

Mark scheme

Level	Descriptors	Marks
L2	A balanced and well-explained answer that considers the extent of 2 or more factors (revenue vs costs) that Australian infant formula milk companies would consider; and is well-supported by theory and case evidence.	**4 – 6**
L1	Response is largely theoretical and limited in scope; or Brief answer which contains some listing and explanation that theoretical and not well-supported by case evidence	**1 - 3**
E	Stand with some attempt at substantiation Stand with well-supported substantiation (eg. using contextual justification to highlight relative importance)	**1 - 2**

e. **To what extent can the measures adopted by the Singapore Government mentioned in Extract 3 increase the affordability of infant formula milk for Singaporeans?** **[10]**

Intro:
The Singapore infant formula milk market can be characterised by an Oligopoly market structure where there are few dominant firms, high barriers to entry and imperfect information.

The measures that the Singapore Government could adopt to curb market dominance are: **(1) consumer education; (2) streamline import requirements to remove unnecessary barriers to entry; and (3) regulations to curb excessive marketing.**

Body:

Consumer education where infant formula milk can be stopped after the age of 1 will reduce the market demand for infant formula milk.
The Health Promotion Board's plans to educate parents who were unaware that infant formula milk can be stopped after the age of 1 will reduce information failure arising from the parents' ignorance by providing parents with information about the true marginal private benefits of their offsprings' consumption of infant formula milk after the age of 1. This will reduce the market demand for infant formula milk, ceteris paribus, exerting a downward pressure in the price of infant formula milk.

Due to the high literacy level of the population, the education campaign will reach out to the parents through the various media platforms. However, the receptiveness of the parents to the campaign may be uncertain given the constraints of the parents' need to juggle the demands of their work commitments which may result in less time to prepare and source for infant formula milk alternatives, hence the fall in demand for infant formula milk may not materialize.

To streamline import requirements as well as remove unnecessary barriers to entry in order to bring in more options for parents (Ext 3) will increase market supply for infant formula milk.

Simplifying and streamlining import requirements and the removal of barriers to entry will increase the number of firms who can offer infant formula milk in Singapore since new entrants will find it less costly and risky to enter the Singapore infant formula milk market despite the strong brand loyalty created by the incumbents, thereby increasing the supply of infant formula milk in the Singapore market. With the increase in supply, ceteris paribus, it will exert a downward pressure on the price of infant formula milk, thereby increasing the affordability of infant formula milk.

With more options available, the demand for branded infant formula milk offered by incumbent firms will also fall since consumers can now switch to the alternative brands and demand also becomes more price elastic.

Despite the streamlining of import requirements, incumbent firms may deter entry by cutting prices (limit pricing) which increases the affordability for consumers but may also take the form of non-price strategies such as product innovation which increases consumer choice instead. Thereby, the extent of the intended effect on price fall is not certain.

Consumers' mind-sets & preferences take time to change. Parents' brand loyalty to the dominant firms' brands due to past experiences and advertising may still linger and result in consumers' perceived benefits derived from branded infant formula milk to be greater than the actual benefits; thereby rendering the above measures ineffective in the SR.

Regulations to curb excessive marketing and encourage greater price competition (Ext 3)

By limiting the extent of these marketing strategies, it lowers the artificial barriers to entry, allowing for a more level-playing field for new entrants into the market to provide equally good infant formula milk. With more options, parents are now able to choose based on the benefits of their infant formula milk, and be less deterred or misled by unnecessary marketing, causing the demand for infant formula milk to be more price elastic. This curbs the extent of market dominance of incumbents reducing their ability to charge high prices, hence increasing the affordability of infant formula milk.

In addition, since new entrants do not need to incur additional costs of marketing, such cost savings could be passed on to consumers in terms of lower prices.
Despite the availability of more substitute brands, demand for branded infant formula milk may still be relatively price-inelastic as they do not perceive the new entrants as close substitutes. Moreover, as it is only consumed for a short term, the proportion of income spent on the good may not be high for the average household in Singapore.

Evaluation/Conclusion:
While the above measures may bring about a fall in the price of infant milk formula, there are limitations and unintended consequence on these firms. For instance, given the oligopolistic nature of the infant formula milk market in Singapore, measures targeted at firms (regulation & streamline import requirements) will be more effective in the short-run due to the uncertainty of the outcome arising from consumer education. However, a fall in the incumbent firms' supernormal profits may affect their ability to develop better infant milk formula in the future.

However, given the possible contestability of markets as a result of the changes in regulations, existing firms are likely to continue to innovate and differentiate their products; especially given that these firms are international brands with extensive market scope.

Mark Scheme

Level	**Descriptors**	**Marks**
L2	A balanced and well-explained answer that consider the extent of **TWO** measures to increase affordability; and is well-supported by case evidence.	**5 - 7**
L1	Response is largely theoretical and limited in scope (only one measure); or Brief answer which contains some listing and explanation that theoretical and not well-supported by case evidence	**1 - 4**

			E	Evaluative comment which assess the extent to which measures can increase the affordability of infant formula milk, taking into consideration the context.	**1 - 3**		

Question 2

a.		**Describe the change in consumer prices in the UK between 2013 and 2017.** Consumer prices increased at a **decreasing rate** from 2013 to 2015 [1] before increasing at an **increasing rate** from 2015 to 2017 [1].	**[2]**
b.		**Explain how the 'squeeze on living standards' of UK households could be caused by the 'sterling-induced jump in cost of living' (Extract 5).** Depreciation of pound sterling led to a rise in the price of imported goods and services in pound sterling. (1) Assuming there were no domestic substitutes available and household incomes remained the same, purchasing power of UK households fell. This translates to a **fall in quantity of imported goods and services** consumed and thereby lowers the **material** living standards for HHs. (2)	**[3]**
c.		**Explain possible reasons why the UK trade deficit did not improve despite the depreciation of the pound sterling.** From Extract 6, UK has slipped down the competitiveness ranking which may suggest a fall in export competitiveness arising from poor quality of exports. This suggests that despite the depreciation of the pound, they might still have been reduced willingness to consume UK exports due to their poor quality. Hence, UK trade deficit did not improve as the depreciation of pound might not have been sufficient to increase consumer's willingness to consume UK exports. (2) As explained in part a), consumer prices have continued to increase, which implies that prices of UK goods & services have increased. Assuming that the inflation rate in UK is faster than the pace of depreciation of pound sterling, price of UK exports in terms of foreign currencies will increase, quantity demanded for UK exports will fall, hence UK export revenue will fall assuming demand for UK exports is price elastic, thereby causing the UK trade deficit to worsen instead of improving. (2) From Extract 5, "time lags arising from importers and exporters having to honor pre-existing contracts" suggests that firms cannot switch their suppliers in the short term (i.e. firms cannot increase demand for UK exports in the short term). Demand for imports and exports remain price inelastic due to time lags in the consumer's search for cheaper alternatives. Hence, despite the depreciation of the pound sterling, trade deficit did not improve because it takes time for UK consumers to switch their expenditure to the relatively cheaper domestic goods and services and for foreigners to switch their expenditure to the relatively cheaper UK exports. (2)	**[4]**
d.		**With reference to Table 2, explain how you would expect the size of the multiplier to differ between the UK and Singapore.** Gross savings (% of GDP) in Singapore is about four times that of UK whereas imports of goods and services (% of GDP) in Singapore is about five times that of UK. It can be **inferred** that the marginal propensity to save (MPS) and import (MPM) is much larger in Singapore than the UK. Since the size of multiplier =	**[3]**

		1/marginal propensity to withdraw (MPW), where MPW = MPS+MPT+MPM, a larger MPS and MPM will thus lead to a larger MPW and hence a smaller size of the multiplier. (2) Thus, UK will have a larger size of multiplier as compared to Singapore. (1)	
e.		**Discuss the possible consequences of Brexit on households and firms in Singapore**. **Intro:** Brexit resulted in the depreciation of pound sterling against the Singdollar (Extract 8) which will have an impact on Singapore households' material standard of living and firms' profitability. **Body**: **Brexit may increase households' consumption of imported goods and service, increasing their material standard of living.** The depreciation of pound sterling against Singdollar results in lower price of UK imported goods and services for households in Singapore. Assuming their income remains the same, purchasing power of households increase which increase their ability to consume a higher quantity of UK imports, thereby resulting in a rise in their material standard of living. **Brexit may reduce households' material standard of living.** British companies start to pull back on investment in manufacturing that will have a knock on effect on local support services (Extract 8). Ceteris paribus, the fall in foreign direct investments from the UK will lead to a fall in I, which will result in a multiplied fall in real GDP and increase cyclical unemployment in Singapore, thereby lowering material SOL as households face a fall in their disposable incomes as some members of their household who are employed in the local support services such as advertising, business and professional services, and financial services may be retrenched due to the fall in demand for such services. **Evaluation:** Given that the Singapore economy is at or near full employment, the fall in AD may result in the easing of demand-pull inflation instead, which will have a positive impact on households' purchasing power since it results in lower prices of goods and services and thereby households may enjoy higher material standard of living. **Brexit may increase the profits of firms who depend on the UK for factor inputs.** For example, companies like Hart Technology (Extract 8) will benefit from the lower price of imported goods from UK as it lowers the marginal cost of production from the lower input prices due to the exchange rate effect. Assume that these firms do not pass on the cost savings to the consumers, profits will increase. The extent of the cost savings that these firms achieve would be dependent on the proportion of the factor inputs that are imported from the UK. **Brexit may reduce the profits of firms who export goods and services to the UK and/or derive earnings denominated in pound sterling.** The pound sterling's free fall against most currencies is expected to hurt Asian exporters with strong exposure to UK markets (Extract 8). As the price of Singapore exports in terms of pound sterling increase, demand for Singapore exports fall, resulting in the fall in export revenue for firms who sell their goods and services to the UK. If cost remains the same, profits will fall. In addition,	**[8]**

		Singapore firms who derived earnings in terms of pound sterling will see a fall in their earnings when they were exchanged for Singdollar, thereby reducing the profits denominated in Singdollar of these firms. **Evaluation/Conclusion:** In the short term, both households and firms will benefit given Singapore's nature & state of economy. Moreover, since Britain is No. 22 on the list of Singapore's trading partners (Extract 8), its impact on Singapore exporters may be limited as UK may not be a significant export market. Firms who have put in place currency hedging measures to mitigate the downside risks of a falling pound sterling for their earnings in pound sterling will also be protected. In the long term, if Brexit were to negatively impact consumer and business sentiments across the EU, that would affect both households and firms in Singapore negatively since EU is a significant export market and source of FDI for Singapore.	

Level	Descriptors	Marks
L2	A balanced and well-explained answer that consider the impact of Brexit on <u>both</u> households and firms; and is well-supported by theory and case evidence.	**4 - 6**
L1	Response that only considers the impact on either households or firms or Brief answer which contains some listing and explanation that are theoretical and not well-supported by case evidence	**1 - 3**
E	For an evaluative conclusion on the consequences, taking into consideration the context and case materials. E.g. time period, type of firms etc.	**1 - 2**

f.		**Assess the measures the government should adopt to address the loss of competitiveness in the UK.** **Intro**: The fall in UK competitiveness may be attributed to: 1) Low productivity growth arising from inefficient training system as seen in Extract 7 which results in the mismatch of skillsets between what workers possess and what firms need, negatively affecting labour competitiveness and export price competitiveness; 2) Domestic infrastructural constraints (e.g. potholed and congested roads, poor business broadband from Extract 7) which increases the cost of doing business, thereby making UK less attractive as a destination for FDI inflows. The measures that the government should adopt to address the loss in competitiveness include: **(1) improving labour productivity**; **(2) improving productivity through investment in transport infrastructure**; and **(3) lowering of corporate tax rate.**	**[10]**

Body:

The Industrial Strategy seeks to boost productivity and earning power of people throughout the UK (Ext 7)

The government seeks to create a new National Retraining Scheme that supports people to re-skill, beginning with a £64 million investment for digital and construction training. As workers acquire the requisite skillsets to work in higher value-added industries, the value of output will increase with the same amount of input, resulting in higher labour productivity which will translate to lower marginal cost of production for firms, hence allowing firms to pass on the cost savings in the form of lower prices of final goods & services which will thereby enhance export price competitiveness of UK exports.

The Industrial Strategy may not address the root cause of the problem (mismatch in skillsets) that could arise due to the poor receptiveness of the UK workers who are generally resistant to undergo retraining. As firms faced the constraints of acquiring workers with the requisite skill sets (Ext 7) since companies can't get the people they need because the training system isn't working to deliver for them, this hampered firms' ability to restructure their operations and thereby lowered the export price competitiveness of its goods and services.

The £1.7bn Transforming Cities Fund which aims to improve productivity through investment in transport infrastructure (Ext 7) will enhance the export price competitiveness of UK goods and services & attraction of the UK as a destination for FDI.

Investment in transport infrastructure will enhance productivity when congestion is eased. Workers take less time to travel and enjoy a less stressful journey to work, which may cause them to become more productive at work. Moreover, firms also enjoy cost savings for transport with less fuel burnt due to the more efficient road networks. These will translate to lower marginal cost of production for firms, hence allowing firms to pass on the cost savings in the form of lower prices of final goods & services which will thereby enhance export price competitiveness of UK exports.

In addition, improvements in transport infrastructure will spur FDI inflows due to the fall in the cost of doing business in the UK. Firms will be more optimistic of the future business outlook and expect profit margins to improve, thereby will increase their productive capacity by stepping up investments in the UK.

There is a long gestation period arising from the need to seek approvals from the community and local government before the projects can go ahead as well as the long construction time coupled with the added inconveniences due to road diversions/closures in the interim may lower UK competitiveness in the short term before benefits begin to materialize in the medium to long-term.

Lowering of corporate tax rates to 17% by 2020 (Ext 7) will also make UK more competitive in attracting FDI.

The lowering of corporate tax rates will increase post-tax profits for firms, increasing their expected rate of returns, thereby spurring FDI inflows into UK as it makes UK a more attractive destination for FDI as firms get to retain a higher level of profits from their investment returns in UK as compared to other countries.

FDI is often driven by other factors like market sentiments and stability of exchange rate. Given the uncertainties brought about by Brexit which weaken both business & consumer confidence in the UK and the sharp depreciation of the pound (Ext 6), the cut in tax rates may not make UK an attractive destination for FDI.

Synthesis and Conclusion

Which measure to adopt will ultimately depend on which aspect of competitiveness the government should focus on. She can take into account the impact of Brexit as well as the fundamental problems faced by Britain (e.g. domestic infrastructural constraints) and may assess that the key to restore UK competitiveness may lie in the need to make UK remain attractive to FDI and foreign skilled labour inflows and thereby pursue measures to achieve that.

Given that UK's lack of competitiveness stem mainly from "fundamentals", the most relevant policies would be measures that improve labour competitiveness and infrastructure as they target the root causes. However, as these policies have a longer gestation period, the government may need to complement them with more immediate policies like reducing of corporate tax rates to attract FDIs. This would be important in the short term given the current economic climate, where Brexit is likely to increase uncertainties and costs for foreign investors.

All the above-mentioned measures will worsen the government budget position as UK will suffer from a double whammy of rising government expenditures to fund the various productivity-enhancing initiatives and falling government revenue from the lowering of corporate tax rates. Despite the improvement in government budget position in 2017, this is not expected to sustain moving forward. Increased indebtedness of the UK government will further worsen competitiveness going forward.

Mark Scheme

Level	Descriptors	Marks
L2	A balanced and well-explained answer that considers **TWO** measures to address at least two aspects of competitiveness (e.g. export, investment, labour); and is well-supported by case evidence.	**5 - 7**
L1	Response is largely theoretical and limited in scope (only one measure or one aspect of competitiveness); OR Brief answer which contains some listing and explanation that theoretical and not well-supported by case evidence.	**1 - 4**
E	For an evaluative judgement that reaches a conclusion based upon consideration of the analysis and context; consideration of the effectiveness of each policy taking into account the main causes of the loss of competitiveness, state of the UK economy etc.	**1 - 3**