	0 859 0		
	S	\mathbb{R}	
å	J	C	Ŗ
	CERE	SERVI	

SERANGOON JUNIOR COLLEGE JC2 Preliminary Examination

ECONOMICS Higher 2

9757/01

Paper 1

10 September 2018

2 hours 15 minutes

Additional Materials: Writing paper

READ THESE INSTRUCTIONS FIRST

Write down your name and civics group on all the work you hand in. Write in dark blue or black pen on both sides of the paper. You may use a soft pencil for any diagrams, graphs or rough working. Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

Start your answers to each case study question on a new sheet of writing paper. At the end of the examination, fasten your answers to questions 1 and 2 **separately**.

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

This document consists of 8 printed pages.

©SRJC

9757/01/Prelims/2018

[Turn over

Answer all questions.

Question 1: The Automobile Industry

Extract 1: Scarce, expensive cobalt essential for electric cars

Cobalt prices more than doubled in 2017, and rose to a record high early this year, driven by a rising demand for electric cars. Cobalt has been used for thousands of years to add blue colour in ceramics, glass and pottery, but now its main demand is as a key ingredient used in lithium ion batteries that power everything from Apple products to Tesla electric cars.

The supply side of the price equation is also boosting cobalt's price. Cobalt is mostly retrieved as a by-product of the copper and nickel mining industry. The prices of copper and nickel have been persistently falling, making production at many locations uneconomic, forcing mines to close. So even though there is strong demand for cobalt, if the rest of the industry is suffering, cobalt production will too.

Source: www.theglobeandmail.com, 27 Feb 2018

Extract 2: It's time to end subsidies for green vehicles

Norway reached a remarkable milestone in 2017, when it became the first country where zeroemission and hybrid vehicles accounted for more than half of new car sales in a calendar year. At the same time, however, the government of Norway announced that it wants to cut back lavish subsidies that allow citizens to save thousands of dollars on the price of a Tesla and other models, while sticking to its plan to make every new car sold a zero-emissions vehicle by 2025.

The Norwegian experience sums up the debate over how best to move away from fossil-fuel cars and onto the next generation of ground transportation – that is, whether or not subsidies for customers are worth it. But it also raises the question of whether that debate has become a moot point. The switch to electric vehicles appears to be speeding up globally, largely fuelled by innovation and government policy in major markets.

In China, the world's biggest car market, a company called Nio began mass-producing electric cars in 2017 with the help of heavy subsidies from a Chinese government that is eager to see the end of fossil-fuel cars in its polluted cities. More than 200 companies have also announced plans to manufacture electric cars to take advantage of the huge subsidies. However, some fear these subsidies may lead to overcapacity of electric vehicles, just like what happened to steel and solar panels. And questions also remain over how long it will take and how much will have to be spent before the industry is viable.

The push to increase sales of electric vehicles in the meantime is expensive, as Norway has learned. A recent study put out by the Montreal Economic Institute pegged the cost to taxpayers of lowering greenhouse-gas emissions in Ontario via vehicle subsidies at a whopping \$523 per tonne. It also said that, for Ontario to reach its goal of electric vehicles constituting five per cent of the new-car market, it will have to spend \$8.6-billion in subsidies over the next 13 years.

That is simply too much money for too little outcome. More critically, governments are subsidising a product that may not need the help. There is every indication that the world has reached a tipping point, and that natural competitive forces will soon start to bring down the cost of electric vehicles. Governments should therefore abandon their electric car subsidies.

Adapted from www.ft.com, 12 Oct 2017

©SRJC

9757/01/Prelims/2018

2

Extract 3: China's automobile industrial policy

In terms of manufacturing scale, China has long established a position for itself as the world's largest automobile factory. On the level of individual manufacturers, however, Chinese manufacturers still lack international competitiveness. China exported less than 5 percent of locally produced automobiles and vehicle exports have been declining for the past two years, suggesting that China is failing to put its excess production capacity to practical use through exports. Chinese automobile manufacturers have also failed to make their presence in other major automobile markets. Chinese manufacturing sector is large but not yet strong. The government should be aware of the limitations of cultivating and supporting domestic enterprises under an automobile industrial policy that is weighted towards scale expansion.

Source: Yuichiro Koga, www.mizuhobank.com, 2 May 2017

Extract 4: Beijing lift restrictions on foreign investment in automobile industry

Since 1984, foreign carmakers have been allowed to produce cars in China — but only in joint venture with a local partner holding at least 50 per cent of the venture. In practice, the local partner is almost always one of six state companies.

The results of the three-decade-old policy have been mixed. Rather than transforming Chinese car companies into technology giants, the joint venture companies have arguably made Chinese carmakers complacent, according to Chinese policymakers. Foreign brands still account for a majority of sales in Chinese passenger cars — and the country's carmakers have failed to export more than a handful of passenger cars under their own brands.

Recently, the Chinese government announced it would scrap the 50 per cent foreign investment cap on automobile joint ventures by 2022. This is expected to encourage global electric vehicle makers to set up wholly owned plants in China. Tesla has unveiled a plan to set up a manufacturing plant in Shanghai.

Mr Jochem Heizmann, head of Volkswagen's China operations, said that the liberalisation sent an "important" signal that other industrial policies that limit competition and innovation might be relaxed. Most US business lobbies however, have dismissed a series of recent market liberalisation measures in the auto and financial sectors — touted by China's president Xi Jinping in a speech on April 11 — as being "too little, too late".

Source: www.ft.com, 1 Sep 2017

©SRJC

9757/01/Prelims/2018

[Turn over





Questions

- (a) (i) Using Figure 1, describe the trend in price of cobalt over the period shown. [1]
 - (ii) With reference to Extract 1, using supply and demand analysis, explain how falling prices of copper and nickel have contributed to the change in the price of cobalt observed in (a)(i). [3]
 - (iii) Explain with the aid of a relevant diagram, how the level of profit of a producer of electric cars is likely to be affected by the change in price of cobalt. [3]
- (b) Discuss whether government subsidies for electric cars would help or hinder the attainment of economic efficiency in resource allocation. [8]
- (c) With reference to Extract 3, explain the reasoning that underlie the Chinese government's automobile industrial policy that is focused on 'scale expansion' and comment on the extent to which this policy has helped to improve the international competitiveness of the industry. [5]
- (d) With reference to the case material provided and your own knowledge, discuss whether on balance, the Chinese government's decision to open up the domestic market for cars to foreign investments will be beneficial for consumers, producers and the government. [10]

[Total: 30]

©SRJC

9757/01/Prelims/2018



Question 2: Impact of Free Trade and Innovation on an Economy

Figure 2: UK's trade balances (£ billions)

5

Source: Financial Times, 18 December 2017



Figure 3: US's economic growth and trade deficit

Source: Menzie D. Chinn and Michael W. Klein, 20 Janurary 2017

9757/01/Prelims/2018

[Turn over

©SRJC

Extract 5: UK-EU¹ economic relations

The European Union (EU), taken as a whole, is the UK's major trading partner, accounting for 44% of exports and 53% of imports of goods and services in 2015. However, the share of UK trade accounted for by the EU is lower than a decade ago. Both the current and previous governments have stated that over three million jobs are linked to exports from the EU. The EU is a major source of inward investment into the UK. In 2014, EU countries accounted for £496 billion of the stock of inward foreign firect investment, 48% of the total. The UK's net contribution to the EU Budget in 2015 is estimated at £8.5 billion. It is forecast to fluctuate between £11.2 billion and £7.3 billion a year between 2016 and 2020.

Various studies have attempted to quantify the economic benefit or cost to the UK of its membership of the EU. This is a very difficult exercise and depends on a wide range of assumptions. The Institute for Fiscal Studies (IFS) has commented that "there is an overwhelming consensus among those who have made estimates of the consequences of Brexit that it would reduce national income in both the short and long runs." Supporters of Brexit argue that the economic consensus has often been wrong in the past.

Outside of the customs union, trade with the EU won't be quite as "free" for the UK as before it exited the EU. Unless UK is inside the customs union, goods imported into the EU will need to provide proof of where and how they were made. Leaving the customs union would allow UK to sign free trade deals with other countries (It cannot do this as a customs union member). By leaving, UK would no longer be a part of existing EU trade deals with other countries, and would face tariffs on trade with other countries until free trade agreements were made.

Source: Research briefings, Parliament UK and fullfact.org



Figure 4: US's trade deficit and the unemployment rate

©SRJC

9757/01/Prelims/2018

Commented [J1]: Suggest to change to European Union (EU)

Commented [J2]: Disjoint here to me, why major trading partner then share of UK trade lower. So added the word however

Source: U.S. Commerce Department and Bureau of Labor Statistics

¹ There is free movement of goods and services, capital and labour among the 28 member countries of the EU but members must abide by common rules and regulations such as rules on environment standards and competition.

Extract 6: Trump hates the trade deficit. Most economists don't.

For decades there has been a consensus that globalisation brought more jobs, higher wages and lower prices – not just for richer countries but also for developing and poorer nations. But there is now a growing movement of anger as people see jobs being taken by machines, old industries disappearing and waves of migration disturbing the established order.

Global trade flows are falling and trade deals are being ripped up. President Trump's fixation with America's widening trade deficit is fuelling his decision to impose stiff tariffs on steel and aluminium imports. Mr. Trump complains about the metric frequently, saying the trade imbalance is a measure of America's weakness on trade policy. "We lost, over the last number of years, \$800 billion a year," he said in the White House on Monday, while defending his tariffs against criticism from Republican leaders in Congress.

Mr. Trump has long argued that the trade deficit hinders economic growth, and that reducing it will accelerate American job creation. The sense of grievance in the US is clear: the manufacturing sector in the country has seen six million jobs disappear between 1999 and 2011, according to the Bureau of Labour Statistics.

Source: New York Times, 5 March 2018

Extract 7: Technology and the innovation economy

Innovation and entrepreneurship are crucial for long-term economic development. Over the years, America's well-being has been furthered by science and technology. Both public and private sector investment created jobs, built industries, fuelled innovation, and propelled the US to leadership in a number of different fields.

By adopting policies such as a permanent research and development tax credit, more effective university knowledge commercialisation, improving worker training, America can build an innovation conomy and sustain its long-term prosperity.

Statistics shows that innovation remains a factor in the so-called Third Industrial Revolution, which began in the nineteen seventies and continues today. The development of electronics, robotics, biotechnology and especially the globalisation of the internet have all contributed to ongoing productivity growth. North American industrial productivity grew at an annual rate 4.1% between 1990 and 2000, a period of only ten years. Moreover, this productivity growth continued up until 2007 at a rate of 3.9%.

Scientific research has continued, and now there are new advances in transportation, with unmanned flights; in medicine, with progress in genetics; in 3D printing; and in the comprehensive integration of the internet in daily life, with "the internet of things". The positive effects on the economy from these innovations will be seen when they are applied and extended throughout society. However, this transformation is not immediate. The life cycle of a technology requires a passage of time between the scientific discovery, the creation of the innovation and the spreading of the technology.

Source: Economy Weblog, 2 October 2014

©SRJC

9757/01/Prelims/2018

[Turn over

Commented [J3]: Innovation or innovative?

7

Extract 8: Technological advancement and long-term economic growth in Asia

Innovation depends on market-based incentives, and most importantly on the scope of the market itself. Developing a new idea requires a significant onetime investment of research and development (R&D), and this "fixed cost" of innovation must be recouped through subsequent sales. If the potential market for the innovation is large, it is obviously easier to recoup the one-time R&D expenses. A small market, on the other hand, will not justify the high onetime costs of R&D.

Source: Jeffrey D. Sachs and John W. McArthur, ACM, Digital Library, 2002

Questions

- (a) With reference to Figure 2, compare the UK's trade in goods with trade in services over the period. [2]
- (b) Explain one possible cost and benefit to the UK economy of its exit from the EU. Assess whether they are likely to occur. [8]
- (c) With reference to Figure 3, state and account for the relationship between US economic growth and trade deficit. [3]
- (d) Extract 6 mentions that 'Mr Trump has long argued that the trade deficit hinders economic growth, and that reducing it will accelerate American job creation.'

How does Figure 4 show that President Trump's concern about the US trade deficit and unemployment is unfounded? Explain why this is so. [4]

- (e) With the aid of a diagram, explain how a tariff on steel imports will reduce the comparative advantage that a steel exporting country has over the domestic country. [3]
- (f) Given that 'Over the years, America's well-being has been furthered by science and technology', discuss whether an improvement in technology or free trade is the key to achieve a higher level of economic well-being for any country. [10]

Commented [J4]: I find this phrase confusing actually... Can I suggest adding the word "imports" after domestic... So it should read: a steel exporting country has over the domestic <u>importing</u> country

[Total: 30]

End of Paper

©SRJC

9757/01/Prelims/2018

8