ANGLO-CHINESE JUNIOR COLLEGE 2013 JC2 PRELIMINARY EXAMINATIONS



ECONOMICS Higher 1 Paper 1

8819/01 28 Aug 2013

3 hours

Additional materials: Answer paper

READ THESE INSTRUCTIONS FIRST

Write your index number and name 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 / tape.

Section A

Answer **<u>both</u>** questions. Begin each Case Study Question on a <u>**fresh**</u> sheet of paper.

Section B

Answer <u>one</u> question. Begin Essay question on a <u>fresh</u>sheet of paper

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

At the end of the examination, arrange your answers in order. Fasten your answers for Section A and Section B <u>separately</u> using the cover sheets provided.

> This document consists of 8 printed pages. Please check that your question paper is complete.

Answer **all** questions in this section.

Question 1 Beyond the Oil Market

Extract 1: Oil price may hit \$150, warns International Energy Agency

The world's leading energy thinktank, Paris-based International Energy Agency (IEA) has warned that oil prices could spiral above \$150 (£93) a barrel from 2012 to 2015, if political unrest in Africa and the Middle East leads to inadequate investment over the coming years. The Middle East and North Africa produce more than one-third of the world's oil. Libya's turmoil shows that a revolution can quickly disrupt oil supply. Libya's oil output has halved, as foreign workers flee and the country fragments. The spread of unrest across the region threatens wider disruption.

Despite a drop in the cost of crude on 9 November prompted by the deepening crisis in the eurozone, IEA said the high cost of crude posed a threat to the global economy and said there was a risk of prices exceeding the previous peak of \$147 a barrel seen in 2008.

The thinktank is expecting demand for energy to grow by a third between 2010 and 2035, with two thirds of the increase coming from the fast-growing emerging countries, and says enormous investment in exploration, drilling and refining will be needed for supply to keep pace. Fears that the outlook for global growth will be affected by Europe's sovereign debt problems prompted oil prices to fall by \$2 a barrel as dealers anticipated weaker demand. Analysts said the fall would have been larger had it not been for the ratcheting up of international pressure against Iran over its nuclear programme.

Source: The Guardian, 9 November 2011



Figure 1: 2012 Oil Prices (US\$ / barrel)

Source: US Energy Information Administration (EIA), 2012

Extract 2: Global economy learns to absorb oil price hike

Despite the increase in oil prices over the past decade, the world has absorbed the price hikes with relatively little disruption due to fundamental changes in the workings of the global economy. IMF economists attribute this resilience to diversification.

Countries have increasingly diversified their energy sources over recent decades. They import energy from more places than in the 1970s. They also use more varied forms of energy. This makes them less vulnerable to disruptions from any one supplier or source of energy. By 2030, it is

©ACJC2013PreliminaryExamH2EC8819/1

expected that energy use will be even more diversified. Oil, coal, and gas are predicted to each have a 30 percent world market share, with hydro, nuclear and renewable accounting for the remaining 10 percent.

However, oil supplies remain a concern. Despite the reduced impact of high oil prices in recent years, large and abrupt price changes remain difficult to absorb, particularly if they come from supply disruptions.

Source: International Monetary Fund (IMF) 25 May 2012

Country	Average Rate of subsidy (%)	Total subsidy as share of GDP (%)			
Iraq	64.3%	19.3%			
Saudi Arabia	79.5%	10.6%			
India	18.6%	2.4%			
Indonesia	23.2%	2.5%			
Taiwan	3.9%	0.3%			
South Korea	0.3%	0%			

Figure 2: Fossil Fuel Consumption Subsidy Rates in 2011

Source: International Energy Agency (IEA), 2011

Extract 3: Global carbon-dioxide emissions increase in 2011 to record high

Global carbon dioxide (CO2) emissions from fossil-fuel combustion reached a record high in 2011, according to International Energy Agency (IEA). This represents an increase of 1.0 gigatonnes (Gt) in 2010. Coal accounted for 45 percent of total energy-related CO2 emissions in 2011, followed by oil (35 percent) and natural gas (20 percent).

In 2011, a 6.1 percent increase in CO2 emissions in countries outside the Organisation for Economic Co-operation and Development (OECD) was only partly offset by a 0.6 percent reduction in emissions inside the OECD. China made the largest contribution to the global increase, with its emissions rising by 9.3 percent. India's emissions rose by 8.7 percent, moving it ahead of Russia to become the fourth largest emitter behind China, the United States, and the European Union.

With energy-related carbon dioxide (CO2) representing the majority of global greenhouse gas (GHG) emissions, the fight against climate change has become a defining factor for energy policymaking – but the implications are daunting. Much additional investment will need to be directed towards lower- CO2 technologies, on supply and end-use sides alike. The benefits that society would reap from these measures would be of an equal if not larger magnitude than the cost to the energy sector.

Source: International Energy Agency (IEA), 24 May 2012

Extract 4: Alternative Energy Market to Soar in Singapore

Singapore's aim is to be a global hub where clean energy solutions are developed, tested, and exported overseas. Singapore's clean energy push centres on solar energy, given its strategic location in the tropical Sunbelt. Besides solar, resources are also being channeled towards wind

energy, electric mobility, smart grids, biomass, fuel cells, energy efficiency, and carbon services. By 2015, the clean energy industry is expected to contribute S\$1.7 billion to Singapore's gross domestic product and employ around 7,000 people.

The Clean Energy Programme Office (CEPO) has since launched several complementary programmes such as The Solar Capability Scheme (SCS) and Clean Energy Research and Test bedding (CERT) Programme to develop the solar energy industry in Singapore. The S\$20 million SCS seeks to encourage innovative design and integration of solar panels into green buildings. The objective is to build up the capabilities of its solar energy systems integrators through increased adoption by lead users in Singapore. The S\$17 million CERT is targeted at the public sector and complements the SCS. CERT aims to provide opportunities for companies to develop and test clean energy applications and solutions using government buildings and facilities in Singapore. Another CEPO programme is the S\$50 million Clean Energy Research Programme that supports R&D efforts in academia and industry.

Manufacturing solar wafers, cells and modules has many parallels with semiconductor and electronics manufacturing processes. Singapore's position as a major semiconductor hub, coupled with all-round capabilities from the precision engineering and chemicals industries, provides the nation with a head start in the solar industry. In addition, Singapore is an efficient base for companies given its excellent supply chain capabilities and linkages to the Asia region.

Source: Singapore Economic Development Board (EDB), 28 May 2013

Questions

- (a) Extract 1 and Figure 1 refer to the changes in oil market.
 - (i) Describe the trend in oil prices in 2012 as shown in Figure 1. [2]
 - (ii) Using demand and supply diagram, account for the International Energy Agency's prediction of the oil prices for 2012. [4]
 - (iii) How far is International Energy Agency (IEA) accurate in its prediction of the oil prices? [2]
- (b) Using the concept of elasticity of demand, explain why the world has become more resilient to oil price hikes as mentioned in Extract 2. [2]
- (c) (i) Compare the total subsidy of fossil fuel subsidy as a share of the GDP for Iraq and Taiwan. [1]
 - (ii) Comment on the possible effects of such a subsidy on Iraq's economic growth. [5]
- (d) With the help of a diagram, explain how 'fossil fuel combustion' (Extract 3) can result in market failure. [6]
- (e) As a consultant economist, what options would you recommend to the Singapore government to overcome the challenges of 'large and abrupt oil price changes' (Extract 2)? Justify your answer.

[Total: 30]

Question 2 Uncertain Future for the UK Economy

Extract 5: UK not out of the woods yet

Figure 3: UK Real GDP Growth Rate

At one level, today's UK trade figures were encouraging. Exports to countries outside the European Union were up 2% to a record high as UK firms started to penetrate some of the world's faster-growing markets. The share of British exports going to the EU dropped to just over 45%, its lowest level since modern records began in 1988. Overall export volumes fell in the first quarter while imports rose, strongly suggesting that trade was a drag on UK growth in the first three months of the year.

This makes it easier to point the finger at the Eurozone as the reason for Britain's stuttering economic recovery. However, a breakdown of GDP showed that weak private consumption shaved 0.5 points off growth and lower government consumption a further 0.3 points - it has been the domestic side of the economy that has been holding the UK back, not overseas demand.

Adapted from Guardian.co.uk, 2012







Source: Office of National Statistics, 2012

Figure 4: UK Government Budget Balance (as percentage of GDP)

Country		United Kingdom				South Korea					
Year		2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
Total Unemployment (%)		5.3	5.3	7.7	7.8	7.8	3.2	3.2	3.6	3.7	3.4
Youth unemployment ¹ (%)		13.3	16.0	19.0	19.9	21.8	8.8	9.3	9.8	9.8	9.6
Real GDP (US\$ Billion)		2110	2090	2006	2043	2063	1212	1240	1244	1322	1371
Composition as percentage of GDP	Private Consumption	61.1	60.7	61.3	61.0	59.7	66.6	65.4	67.9	65.5	65.7
	Government Consumption	22.7	23.2	24.5	24.1	24.2	4.8	4.2	4.3	4.2	4.1
	Investment	18.8	17.8	15.0	16.2	16.0	27.1	27.0	24.6	22.5	22.2
	Exports	27.7	28.3	27.1	28.2	29.3	43.5	46.4	45.7	50.2	51.4
	Imports	30.3	30.0	27.9	29.5	29.2	42.0	43.0	42.5	42.4	43.4

Table 2: Selected macroeconomic indicators for South Korea and UK

¹ Youth Unemployment is the percentage of 15-24 year olds who are part of the labour force but are unemployed

Source: The World Bank, OECD

Extract 6: A generation left behind

Youth unemployment is rising perniciously across much of the developed world. Poor growth, widespread austerity programmes and the winding up of job-creating stimulus measures threaten further unemployment overall. The young jobless often get a particular bounce in recoveries: first out, they are often also first back in. However the lack of a sharp upturn means such partial recompense has not been forthcoming this time round.

Youth unemployment has direct costs in much the same way all unemployment does: increased benefit payments; lost income-tax revenues; wasted capacity. In Britain a report puts the cost of the country's 744,000 unemployed youngsters at £155m (\$247m) a week in benefits and lost productivity. Some indirect costs of unemployment, though, seem to be amplified when the jobless are young. One is emigration: ambitious young people facing bleak prospects at home often seek opportunities elsewhere more readily than older people with dependent families.

Youth unemployment leaves a "wage scar" that can persist into middle age. After a period of unemployment, the temptation to take any work can be strong. Wage scarring is one of the reasons to think this has lasting effects. Young people unemployed for a long time are usually channelled into "non-regular" jobs where pay is low and opportunities for training and career progression few. Employers seeking new recruits for quality jobs generally prefer fresh graduates over the unemployed, leaving a cohort of people with declining long-term job and wage prospects.

Adapted from the Economist, 2011

Extract 7: The great mismatch

A big part of the youth unemployment problem is that educators and employers operate in parallel universes. The best way to bring these two universes together is to revamp vocational education. Some far-sighted countries such as South Korea have reinvented vocational schools to reduce the country's shortage of machine operators and plumbers; counteracting the country's obsession with academic laurels.

Adapted from the Economist, 2011

Extract 8: Will growth give them a job?

The most obvious way to tackle unemployment is to reignite growth. That is easier said than done in a world plagued by debt, and is only a partial answer. The countries where the problem is worst (such as Spain and Egypt) suffered from high youth unemployment even when their economies were growing. Throughout the recession companies have continued to complain that they cannot find young people with the right skills. This underlines the importance of two other solutions: reforming labour markets and improving education.

Youth unemployment is often at its worst in countries with rigid labour markets characterised by cartelised industries, high taxes on hiring, strict rules about firing and high minimum wages. Closing the skills gap will also require a change of attitude from business. Some companies (e.g. IBM & McDonald's) are revamping their training programmes, but the fear that employees will be poached discourages them from investing in the young. However, some employers have begun to co-operate with colleges to design training courses. Technology is also reducing the cost of training: online courses can help apprentices combine on-the-job training with academic instruction.

Adapted from The Economist, 2013

Questions

- (a) With reference to figures 3 and 4,
 - (i) Describe the trend in the government budget balance as a percentage of GDP in the UK between 2007 and 2011. [2]
 - (ii) Explain how GDP growth rate could have affected the government budget balance. [3]
- (b) (i) Compare the trend of the volume of UK's exports to EU and non EU countries between 2009 and 2012. [2]
 - (ii) Explain whether the trend observed in b(i) can be used to conclude that UK's export revenue has increased between 2009 and 2012. [2]
- (c) Using the data, explain the relative importance of private consumption and net exports on UK's economic recovery in 2011. [3]
- (d) In Extract 6, wage scarring is considered one of the reasons why youth unemployment has lasting effects.
 Discuss the impact of youth unemployment on present and future economic growth. [8]
- (e) With reference to the data, assess whether "reinventing" vocational education is the key to reducing unemployment in the UK. [10]

[Total: 30]

Section B

Answer **one** question

Begin this section on a *fresh* sheet of paper.

- 3 (a) Explain the economic justification for the government intervention in the provision of public goods. [10]
 - (b) Discuss, to what extent, should private goods be left entirely to the private sector to achieve an efficient allocation of resources? [15]

4 (a) Explain how a country may benefit from free trade. [10]

(b) Discuss the view that protectionistic measures should not be undertaken to correct the current account deficit. [15]