RIVER VALLEY HIGH SCHOOL
YEAR 6 Preliminary Examination II
in preparation for General Certificate of Education Advanced Level
Higher 2

ECONOMICS 9757/01

Paper 1 Case Study **12 September 2017**

2 hours 15 minutes

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.

Answer **all** questions.
Start each case study on a new sheet of paper.

At the end of the examination, fasten your work securely together.
Your answers for each case study are to be handed in **separately.**

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

Answer **all** questions.

Question 1: The market for oil and electric cars

Table 1: Oil production and consumption (millions of barrels)

Region	Consumption		Production	
	2014	2015	2014	2015
North America	23421	23753	18833	19733
South & Central America	7171	7139	7659	7761
Europe & Eurasia	18287	18450	17206	17479
Middle East	9180	9300	28515	30065
Asia Pacific	31195	32494	8307	8369
Total	89254	91136	80520	83407

Source: BP Statistical Review of World Energy

Extract 1: Are low oil prices here to stay?

Despite a recent upturn, the price of oil has slumped almost 50% since last summer following the longest-running decline for 20 years. US oil, and to a lesser extent Libyan oil returning to the market, has pushed up supply while a slowdown in the Chinese and EU economies have led to a poor outlook for the economy, causing oil prices to fall sharply.

This is precisely when the Organization of Petroleum Exporting Countries (OPEC), the cartel of major global oil producers, would normally step in to stabilise prices by cutting production. It has done so many times in the past, so often in fact that the market expects OPEC to intervene.

This time it hasn't. In a historic move at the end of last year, OPEC said not only that it would not cut production from its 30 million barrels a day quota, but had no intention of doing so even if oil fell to US$20 a barrel. And this was no empty threat. Despite opposition from Venezuela, OPEC leader Saudi Arabia refused to bail out its more vulnerable members. Many OPEC members need an oil price of US$100 or more to balance their budgets, but with an estimated US$900bn in government reserves, Saudi Arabia can afford to play the waiting game.

OPEC now supplies a little over 30% of the world's oil, down from almost 50% in the 1970s, partly due to US oil producers flooding the market. "Given this scenario, who should be expected to cut production to put a floor under prices?" OPEC argued last month. Equally, Saudi Arabia is not prepared to sacrifice more market share while its competitors, not least US oil producers, prosper. Safe in the knowledge that it can withstand very low oil prices for the best part of a decade, it would rather stand back and "let economics do the work".

Source: *BBC News*, 24 February 2015

Extract 2: Why the low oil price will not harm sales of electric cars

Crude oil makes up about 50% of the volume of modern cars. It is not only used to power vehicles, but can also be present in other areas of the vehicle such as in the enamel in paint to the synthetic rubber in the tyres. Increasingly, it is widely assumed that the tumbling oil prices will put a dent in the sales of electric cars, as internal combustion engines of conventional vehicles become increasingly cheap to run. But for buyers of electric cars, the relative cost of refuelling is in fact a minor consideration. The popularity of electric cars in the years to come will depend much more on improvements to their performance than on the oil price.

Buyers of electric cars are not looking for cheap motoring. Electric cars attract some buyers because they serve as a badge for people committed to environmental protection to demonstrate to the world that they care about the environment, no matter what the cost. Owners of electric cars are not looking for budget motoring but status as early adopters of cutting-edge technology. Low maintenance costs and the ability to recharge at home add to the appeal of electric cars.

In the long run, the cost of the vehicles themselves will be far more influential than the oil price when it comes to getting people to buy them. Already, where battery packs generally comprise an estimated 25% of total costs of electric car production, economies of scale reaped by companies like Tesla, an electric car maker, has led to a decline in the cost of producing battery packs for electric vehicles from about US$1000 per kWh in 2007 to about US$450 per kWh in 2014. The battery in a Nissan Leaf, the world's bestselling electric car, accounts for half the selling price. However, a breakthrough in battery chemistry or other technologies will be needed to bring costs down enough to make electric cars a realistic mass-market prospect. Yet, the challenges of overcoming a lack of infrastructure have yet to be resolved. If electric cars fail to catch on, low fuel prices will not be the reason.

Source: *The Economist*, 24 February 2015

Extract 3: Toyota follows Tesla in announcing technology sharing initiative

Japanese carmaker Toyota this week announced it will freely share all of its hydrogen fuel cell technology in order to spur development of low-emission cars around the world. Elon Musk's Tesla Motors, took a similar step in making its patents available to other carmakers late last year. Both firms are trying to avoid a total collapse of the newly-formed electric car market. The first generation low-emission vehicles will be critical, requiring a concerted effort and unconventional collaboration between automakers, government regulators, academia and energy providers.

Source: *The Guardian*, 8 January 2015

Extract 4: China's electric car boom - Should Tesla Motors worry?

During the last four months of 2014, China's electric vehicle sales skyrocketed. Analysts attributed the jump in sales to the elimination of the vehicle tax on Chinese electric vehicles. When China's auto market started to slow in 2008, together with the rest of the world, the country sought to stimulate automotive sales and encourage its citizens to buy cleaner cars by cutting taxes on energy-efficient gasoline engines. In 2008, the central government cut taxes on these small cars to 5% from 10%. That was the year China became the largest auto market in the world.

It's still far from clear what factors are driving China's recent electric vehicle boom and why Tesla was left out. Another possibility is that China's policies to promote electric vehicles have finally reached a tipping point. For instance, to deal with traffic congestion in major Chinese cities, many municipal governments, including Beijing, have limited the number of new vehicle registrations. In Beijing, electric vehicles are exempt from this quota system. The central government has also instituted a new set of policies to encourage competition among domestic manufacturers, such as providing subsidies to help smaller companies achieve large-scale production, which increases competitive pressure that was woefully lacking during the early years of China's electric vehicle program. Perhaps locally produced vehicles have finally reached a quality threshold that make them attractive to Chinese buyers.

Whatever the reason, just as China's electric vehicle market is taking off, Tesla is facing new competitive challenges at home and abroad. Traditional automakers like BMW, Volkswagen and General Motors are developing electric vehicles that are faster, cheaper, and boast better range than before. In fact, in October 2014, Volkswagen's CEO announced the company was developing more than 20 types of electric vehicles for the Chinese market. Then there is also the prospect of competition from newcomers like tech giant Apple which is hiring away Tesla's engineers with high salaries and is rumoured to be developing its own electric car. At the same time, Tesla is struggling to establish its brand in the world's key emerging market at what may be a critical inflection point. That is a huge problem.

Source: *Fortune*, 18 February 2015

Questions

(a) (i) Given the information contained in Table 1, identify the region that has had the greatest impact on world oil prices. Justify your answer. [3]

(ii) Besides the return of US oil and Libyan oil pushing up supply, explain one other reason that has contributed to the change in world oil prices. [2]

(b) What can you conclude from the evidence in Extract 1 about the likely value of the price elasticity of demand of oil? [2]

(c) Explain how OPEC can 'stabilise prices by cutting production' of oil. [3]

(d) Describe the likely market structure of China's electric car industry. [2]

(e) Discuss the factors affecting the choice of competition strategies in China's electric car industry. [8]

(f) Assess how the level of contestability of the electric car market in China impacts the ability of the firms in the industry to earn excess profits in the long run. [10]

[Total: 30]

Question 2: Problems in the European Union

Extract 5: Germany needs migrants as workforce dwindles, but must pay for them

German chancellor Angela Merkel has refused to put a cap on refugee numbers to a country where the population of around 82 million is set to shrink by 15 percent by 2050, according to government forecasts, with the workforce falling by 30 percent.

But many of the people currently arriving from countries such as Syria do not speak German and have few formal qualifications, so it will take time and investment to reduce their dependence on state welfare and get them into work. Each unemployed refugee costs taxpayers 12,000 euros a year, government figures show. Only 8 percent find work in the first year and most rely on the state for everything from food and housing to language courses. However, the costs will be offset within 5 to 10 years as more and more refugees start working and paying taxes, according to a study by the German Institute for Economic Research (DIW). The study forecast that rising migrant employment would gradually drive up German national output, with per capita income increasing by 0.5 percent by 2030. In addition, Germany, the largest economy in European Union, is expected to post a budget surplus this year and thus, has the means to accommodate the refugees.

To tackle a lack of formal qualifications or schooling, an extra 30,000 teachers are needed for refugees and their children to boost their chances in the labour market, according to the Cologne Institute for Economic Research.

Source: *Reuters*, 11 December 2015

Extract 6: Germany's record trade surplus is a bigger threat to European Union than Greece

This is the fifth consecutive year that Germany’s surplus has been above 6 percent of GDP and is surely more dangerous for European Union unity than anything going on in Greece. International Monetary Fund warned last year that the German surplus is destructive for the Economic and Monetary Union (EMU) as a whole. It is not in Germany’s own economic interest, and makes it even harder for the EMU crisis-states to claw their way out of trouble. Germany’s trade surplus was achieved by squeezing wages in the early years of EMU, undercutting the production cost in the South. Efforts by France, Spain, Italy, Portugal and Greece to claw back lost ground by doing the same at this late stage is precisely what pushed the EMU system as a whole into a deflationary slump from 2011 to 2014. The imbalance is also getting worse because the German regulatory and tax structure is geared in favour of output and exports, and against consumption.

Chronic surpluses are a way of stealing demand from elsewhere as they export unemployment to other countries. The sooner Germany abandons fiscal control and invests its own money in its own country for its own good, the better it will be for everybody.

Source: *Telegraph*, 5 May 2015

Extract 7: Don't Blame Germany for Greece's Debt Crisis

The prevailing narrative of the Greek crisis was that the Germans, the European Central Bank and the International Monetary Fund (IMF) had saddled too much debt on the Greeks and imposed counterproductive austerity policies on its government.

But the prevailing narrative overlooked a number of inconvenient truths. The first fact is that this is actually the third bailout in the last five years, and in 2012, the Greeks did benefit from a $117 billion write-off of debt owed to private banks. Second, much of the roughly $380 billion in remaining debt is owed to sovereign nations, meaning that the true creditors are German, Dutch, French and other European taxpayers. Third, while Greece did adopt painful fiscal austerity in recent years, it has been slow to carry out many of the needed structural reforms (such as privatizing state-owned enterprises) it agreed to under previous bailouts.

Furthermore, countries most adamant about being tough on the Greek were not the Germans, but poorer eastern European Union member nations where people are understandably frustrated at bailing out Greece. On the other side, however, German taxpayers will now pay a good chunk of a third Greek bailout.

Source: *Times*, 31 July 2015

Extract 8: Borders are closing and banks are in retreat. Is globalisation dead?

Globalisation was meant to be the unstoppable economic force bringing prosperity to all but that was before the financial crisis. For the past four years, international trade flows have increased more slowly than global GDP. Even though global trade flows are still expanding, crisis-scarred global banks are retreating from risky cross-border lending. There are also some sectors where globalisation is in substantial retreat, like the steel industry where trade flows have never returned to pre-2007 levels. From 2009, although governments have generally not resorted to blatant protectionist measures, quieter ways of giving domestic firms an unfair advantage, like tax rebates for exporters, have often been undertaken.

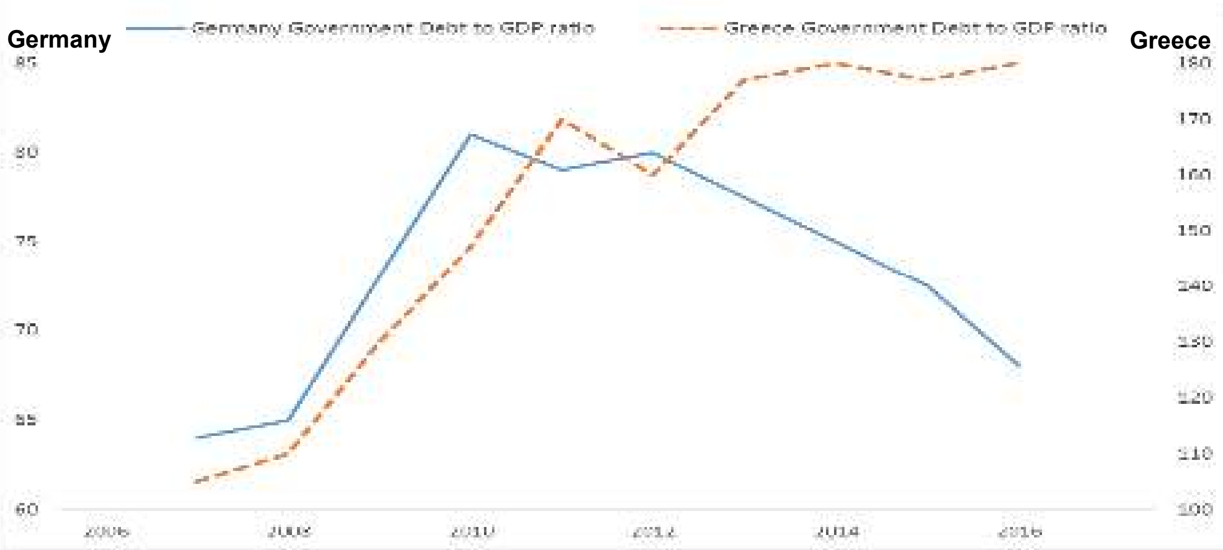
With globalisation, IMF has suggested that developing countries must be cautious about expanding their banking sectors and opening up their capital markets without tough regulation as inflows of speculative “hot money” can be dangerous. In addition, just as governments have not always been good at protecting their citizens from rapid inflows and outflows of foreign money, the failure to shield workers from foreign competition has also undermined faith in globalisation.

Globalisation has been an extraordinary force for lifting people out of poverty in the global economy of big, low-income countries like China and India. At the same time, it has been a boon for consumers in the west, who have feasted on imports of cut-price goods. But globalisation has also become a scapegoat for mass layoffs and stagnating wages among workers in some developed countries, as manufacturing jobs have been shifted offshore especially in the US. Even though US is a big winner from globalisation, but within that there are probably millions of losers as US does not have an effective social safety net for workers who lose their jobs. In the European Union, it has been migration flows that have caused controversy but there is little evidence that migration lowers domestic wages. However, with median wages stagnating, the free movement of goods or workers often gets the blame.

In the long term, globalisation will only be supported if there are better social safety nets at home and proper controls on cross-border capital flows to make trade more stable.

Source: *The Guardian*, 23 May 2015

Figure 1: Debt to GDP Ratio in Germany and Greece



Source: www.tradingeconomics.com accessed on 7 August 2017

Table 2: Germany's exports to trading partners in 2015

	% of total exports
United States	9.53
France	8.58
United Kingdom	7.43
Netherlands	6.61
China	5.98

Source: World Bank, accessed on 7 August 2017

Questions

(a) Compare the patterns of the government debt to GDP ratio in Greece and Germany between 2010 and 2015. [2]

(b) Extract 7 suggests that austerity measures were imposed on Greece to help reduce its debt. Explain the likely factors that may influence the effectiveness of these measures. [4]

(c) Extract 5 mentions that German chancellor Angela Merkel had refused to put a cap on refugee numbers into Germany. Using cost–benefit analysis, explain why this decision was made. [6]

(d) Assess whether the problems posed by Germany's trade surplus or Greece's debt will be more serious to the European Union. [8]

(e) With reference to the data, discuss whether the benefits associated with a less globalised world will outweigh the costs. [10]

[Total: 30]

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