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

ECONOMICS **9732/01**

Paper 1 Case Study **16 September 2014**

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 cover sheet provided is to be place on top of your answers for Question 2.

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

Answer **all** questions.

Question 1

Distortions in the energy markets

Extract 1: Wind farm subsidies to top £1billion this year

According to an analysis of official figures by the think-tank Renewable Energy Foundation (REF), the total annual subsidy for onshore and offshore wind farms in the UK has topped £1bn. The disclosure comes ahead of a long-awaited government announcement to cut the size of the subsidy which has benefited the big energy companies but is added on to household electricity bills as a levy.

The subsidies were introduced by the Labour government to encourage green energy projects, including wind farms. However, it is now generally accepted that the subsidies are too generous due to advances in technologies. REF estimates that on current renewable energy targets, and with only modest cuts, the energy companies will have received £100 billion in subsidies by 2030. REF said it expects 10 companies, between them, to pocket £800million through subsidies over the next 12 months.

Out of the top 10, only two of the companies are British-owned. The remaining energy companies that make money out of British wind farms and British consumers are based in Germany, Norway, Spain and Italy.

Source: The Telegraph, 14 Jul 2012

Extract 2: Wind power still gets lower public subsidies than fossil fuel

Public subsidies for the development of wind power in the UK are far less than the tax breaks given to fossil fuels. Financial support for fledgling renewable energy industries has increasingly come under attack in recent months, but the new data shows that the older industries benefit to a far greater extent.

The UK's greater subsidies for fossil fuels mirrors the global situation, with the International Energy Agency (IEA) recently showing that in the 37 countries it analysed, oil, gas and coal received $409bn (£261bn) in 2010 compared with $66bn for renewable energy.

Almost 90% of the fossil fuel subsidy in UK comes from the reduced rate of VAT paid by households. In the UK, VAT on gas and electricity is 5% rather than 20% charged on most other goods. If such price cuts were intended to reduce energy costs for poorer households, they were a very blunt tool.
.
The former chief executive of British Petroleum (BP), has backed wind power subsidies. "People forget the government supported the oil and gas supply chain in its early days: with generous tax incentives, training programmes, strategic infrastructure and supportive regulation," he said in 2011. "The result today is a world leading industry, creating jobs in manufacturing and engineering across the UK.".

The government acknowledged that investing in wind, marine, solar and other renewable energy sources will help meet the nation's greenhouse gas emissions target, as well as provide economic opportunities for the UK and a less volatile energy market. It points to rising global gas prices as the major reason for the sharp rise in home energy bills in recent years. Opponents argue that investing in renewables is unaffordable in this economic climate.

Source: The Guardian, 27 February 2012

Extract 3: Fossil fuel subsidies

One of the most surprising and alarming issues in the climate and energy arena is the fact that the fossil fuels causing global warming continue to receive substantial government support. While government support given to environmentally beneficial renewable power sources is subject to seemingly endless media and political scrutiny, the 500% larger subsidies given to oil, gas and coal rarely get much attention.

The IEA's analysis focuses on the government policies designed directly to reduce the price of fossil fuels. The bulk of these "consumption subsidies" are given out in developing and transitional economies. One thing that is immediately striking here is that consumption subsidies tend to be biggest in nations that export a lot of fossil fuels, whether it is Saudi oil or Russian gas. In Egypt, subsidised low petrol prices were sustainable while domestic oil production were high but as the oil industry has declined, subsidies have become a huge burden. And Egypt is not alone, many countries in Middle East, South East Asia, South America and Africa heavily subsidise petrol.

Source: The Guardian, 18 January 2012

Extract 4: Phasing out fossil fuel subsidies could provide half of global carbon target

Eliminating subsidies for coal, gas and oil could save as much as Germany's annual greenhouse gas emissions each year by 2015 and such a move could provide half of the carbon savings needed to stop dangerous levels of climate change. While the G20 nations pledged in 2009 to phase out such fossil fuel subsidies in the "medium term", the hundreds of billions that governments spend each year rose in 2010. As such, this has been undermining the competitiveness of renewables.

Most developed countries have already phased out policies that directly subsidise fossil fuel consumption. But recent analysis by the OECD suggests that these nations continue to prop up the oil, gas and coal industries in less obvious ways, such as providing tax breaks or favourable access to land and infrastructure. These indirect mechanisms are worth an estimated $45–75bn. Coal, the most polluting of the three main fossil fuels, currently receives 39% of this support, mostly as a result of governments in Europe, and to a lesser extent Australia, Canada, Korea and the US, trying to ensure that changes to their coal-mining industries happen gradually rather than overnight.

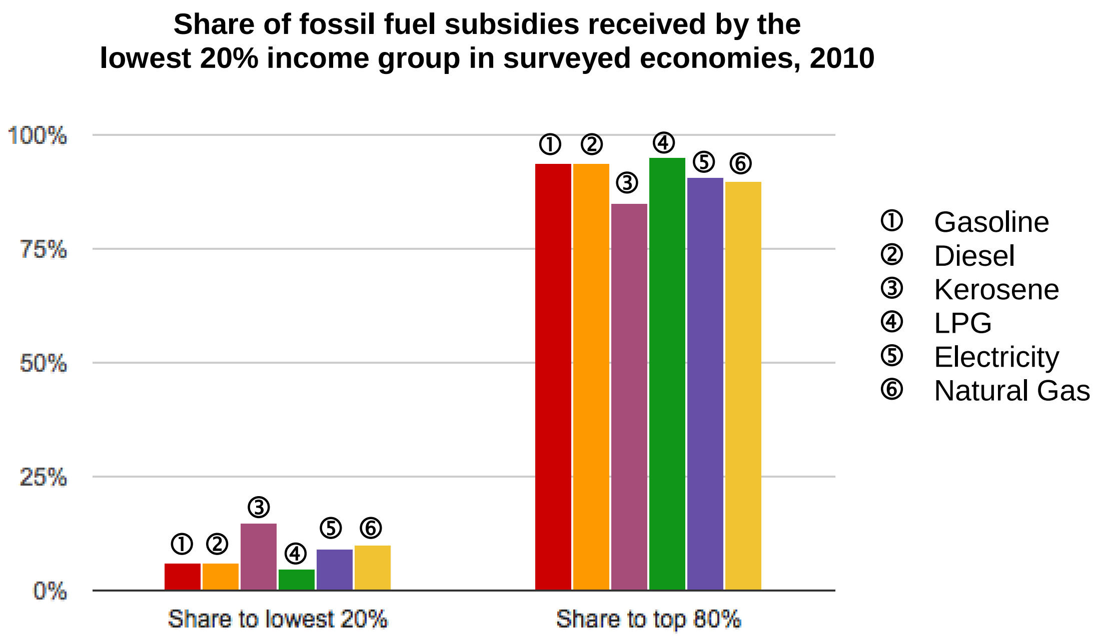
Source: The Guardian, 19 January 2012

Table 1: Own price elasticities of energy sources for selected countries

Country	Oil	Gas	Coal
Japan	-0.03	-0.00	-0.19
UK	-0.04	-0.13	-0.18
USA	-0.01	-0.00	-0.03
China	-0.01	n/a	-0.04
India	-0.00	n/a	-0.04

n/a = not available

Source: World Bank, 2010



Source: International Energy Agency, 2011

Figure 1

Questions

(a) With reference to the data in Table 1,

(i) state how the own price elasticities of energy sources help to determine the nature of the good. [1]

(ii) explain what determines the effectiveness of an increase in the price of oil in reducing total energy consumption in the UK. [4]

(b) Explain how advances in technologies affect the level of subsidies given to encourage green energy projects. [3]

(c) Explain how investing in renewable sources of energy can help to mitigate the rise in home energy bills. [2]

(d) Using the concept of opportunity cost, explain whether there is justification for consumption subsidies to be high in nations that export a lot of fossil fuels. [2]

(e) With reference to the data where appropriate, discuss the view that fossil fuel subsidy to consumers are likely to bring about more costs than benefits. [8]

(f) Extract 4 states that 'eliminating subsidies for coal, gas and oil could … provide half of the carbon savings needed to stop dangerous levels of climate change'. Using demand and supply analysis, discuss the policy options available to governments in the fossil fuels and related market to meet their carbon target. [10]

[Total: 30]

Question 2

The Russian Economy

Table 2: Economic growth of selected emerging economies

	2007	2008	2009	2010	2011	2012
China	14.2	9.6	9.2	10.4	9.3	7.7
Russia	8.5	5.2	-7.8	4.5	4.3	3.4
India	9.8	3.9	8.5	10.3	6.6	4.7

Source: World Bank

Extract 5: Monetary policy shift in Russia

The global financial crisis that started in 2008 deeply affected Russia's economy and financial markets. It also precipitated a monetary policy shift that had been on the policy agenda for the previous few years. The Bank of Russia has since entered into a transition path from an exchange rate-based monetary policy to one focused on price stability. Increased exchange rate flexibility and, ultimately, a shift to a floating exchange rate regime are considered by the Bank of Russia to be part of its medium-term strategy. Exchange rate flexibility has proved to be a crucial precondition for a more effective interest rate policy.

Source: Central Bank of the Russian Federation

Extract 6: Russian Economy Slow to Recover, World Bank Says

Russia is rebounding from the global recession too slowly. According to a report by the World Bank, ageing population, unproductive workers, the reluctance to invest over the long term due to risk in general and concerns about Russia are factors weakening the Russian economy. The report highlighted low capital investment a particular concern. Russia is spending on factory equipment, trucks and airplanes at a level typical of more developed economies like Germany. And the problem of Russia's workers is not helping. They are far less productive than their counterparts in the wealthy countries in the OECD. Hour for hour, Russian workers produce only 43 percent of what their counterparts in developed countries do, the report said.

Nonetheless, Russia's public finances still appear robust compared with ailing European neighbours despite government welfare spending was up from 11 percent of Russian household income in 2007 to 18 percent in 2011. Russia had a budget surplus equivalent to 0.8 percent of GDP last year. Its public-sector debt is only 10 percent of the GDP, compared with more than 100 percent for many European states. Indeed, high oil prices have helped obscure these economic vulnerabilities.

Source: The New York Times, 27 Mar 2012

Extract 7: Reviving Russia's growth

The slowdown of Russia's economy highlights the challenges facing the world's largest energy exporter as oil prices are forecast to stagnate this year and Europe's stumbling economy saps demand for Russian commodity exports. The government began an open campaign this month to push the central bank to lower rates, a step the regulator is resisting because of concerns the economy is already growing near its potential. Fixed-capital investment contracted in annual terms in December for the second time in four months, the Federal Statistics Service in Moscow said in a report last week.

The central bank raised borrowing costs in September, becoming the largest emerging market to do so last year. First Deputy Chairman Alexei Ulyukayev said he does not see any potential gains from reducing interest rates. The joblessness rate fell to 5.3 percent in December, putting it below the full employment rate of about 6 percent, according to Aton's Westin.

The government is looking to investment as a source for growth amid signs that household consumption, which accounts for about half the economy, is stumbling. Real wages advanced at the slowest pace in more than three years in December, which may sap buying power.

Putin ordered his government on the day of his inauguration for a third term as president, to increase investment to 25 percent of economic output by 2015, up from 21 percent in 2011. Russia is currently 112th position in the World Bank's Ease of Doing Business Index, behind countries including Egypt, Pakistan and Papua New Guinea.

Source: Bloomberg, 31 Jan 2013

Extract 8: Russia's entry to the WTO

Russia's acceptance into the World Trade Organization last month opened a door to free up global trade with a nation that is one of the world's largest oil producers and home to the globe's biggest natural gas reserves and second largest coal reserves.

According to Martina Bozadzhieva, a senior analyst at Frontier Strategy Group, WTO accession will increase the competitiveness of the Russian economy and foreign direct investment inflows over the long term. Russia has committed to fully apply all WTO provisions and lower its tariffs on a wide range of products. But do not expect that to happen all at once. Moreover, for energy exports, Russia has not made any commitment to reduce its export tariffs in its agreement with the WTO and "it has made it clear it will continue to subsidize domestic energy prices for the foreseeable future," said Bozadzhieva.

"The entry to the WTO has opened up opportunity for China to achieve its growth in the past ten years," said Cong Li, a chief investment officer at Mirae Asset Global Investments. Compared with Russia, however, "China has an advantage in terms of its large scale, cheap labor force as well as efficient infrastructure and logistics built by public investment."

Source: The Wall Street Journal, 20 Jan 2012

Extract 9: Excitement over Russia's WTO deal

With the Russians finally gaining access to the World Trade Organization, the temptation is to compare this with China's 2001 acceptance into the WTO, which set off a bonanza in global trade and ushered in a golden age of export-led growth for China. But this is an entirely different ballgame. Russia is not so interested in boosting its exports as it is in stimulating its economy through more consumer spending, higher income, and increased efficiency.

While its new WTO membership will certainly open opportunities for Russian businesses to export more, the big benefits will come from companies selling into Russia's $2 trillion economy at more competitive prices. As tariffs slowly fall, Russian industry will either have to evolve or die. For many sectors, like the Russian automotive industry, that process is well under way. Nonetheless, in the long run, Russia stands to gain an extra 11 percent annually in GDP ($162 billion) due to increased trade, according to a World Bank study from March.

Charles Kupchan, a senior fellow at the Council on Foreign Relations, is cautious about how big an impact Russia's WTO deal will have on global trade. While its economy, like China's, is fueled by exports, Russia's is much more commodity-based, one that lacks China's low-wage structure. "The Russians don't have a fleet-footed economy that will embrace these reforms quickly," says Kupchan.

Source: Businessweek, 22 August 2012

Questions

(a) With reference to Table 2, identify how the Russian economy had fared against the other emerging economies. Justify your answers. [3]

(b) Explain why increased exchange rate flexibility is a crucial precondition for a more effective interest rate policy. [3]

(c) Explain why the robust Russia's public finance might not continue. [4]

(d) State two possible reasons why Russia has not made any commitment to reduce its export tariffs for its energy exports in its agreement with the WTO. [2]

(e) Discuss whether a rate cut, favoured by the Russian government, is the best policy approach to revive Russia's economic growth. [8]

(f) Discuss how far Russia would benefit from its accession into the WTO. [10]

[Total: 30]