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

ECONOMICS 9732/01

Paper 1 Case Study **12 September 2011**

2 hour 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.

At the end of the examination, fasten your work securely together.
Answers for Question 1 and 2 are to be handed in **separately.**
Start Question 2 on a new sheet of paper.

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

Answer **all** questions.

Question 1

Developments affecting the Retail Petrol Market

Table 1: Number of Petrol Stations in Singapore (as of Dec 2010)

Player	Number of Petrol Stations
ExxonMobil (Esso)	65
Shell	63
SPC	38
Chevron (Caltex)	33
Total	**199**

Source: Competition Commission of Singapore

Extract 1: Just one lone petrol station in Punggol

One is a lonely number, and it is the reason motorists in Punggol are being driven mad. The new town has just one petrol station and long, snaking queues are common, especially during the weekends. The Singapore Petroleum Centre (SPC) station caters to 82,000 residents. Neighbouring new town Sengkang has three petrol stations.

On busy days, as many as 10 cars line the road leading up to it, despite there being no huge discounts. When contacted, the Urban Redevelopment Authority (URA) said land is set aside for petrol stations in new towns. The release of sites for tender depends on factors such as the growth and size of the new town. SPC secured the 30-year Punggol site three years ago for $8.5 million.

Land premiums paid for the retail petrol sites are generally high because of site scarcity. Prices of sites may differ because of location of site as well as the traffic volume in the area. Petrol retailers with better financial capabilities are more able to seek out premium sites with high car traffic. The URA said that while demand is a key factor, there are some areas, such as densely built-up Orchard Road, which are simply no-go zones because of "security and technical requirements".

In all, there are about 200 petrol stations in Singapore. Areas like Serangoon and Bukit Timah boast at least three stations in a single kilometre stretch. Given the mobility of vehicle traffic, a petrol retailer needs a critical number of petrol stations, approximately 30 stations, located throughout Singapore to be viable.

Source: *Straits Times*, 30 May 2010

Extract 2: Petrol Stations upping their game to woo customers

Petrol stations, meanwhile, are upping their game to woo customers. Besides fuel, customers can get a whole lot more at the stations. For example, FairPrice Xpress stores at Esso stations were recently enhanced to add fresh produce such as frozen meat, cheese and vegetables to their line-up of products. It also trotted out Citibank drive-through ATMs at several outlets last year.

Said Exxonmobil's retail manager Thia Ling Ling: 'With changing demographics such as more dual-income busy families, we offer our customers the convenience of shopping for their groceries, or withdrawing cash from an ATM, all while refueling their cars at the station.'

Source: *Straits Times*, 30 May 2010

Extract 3: The push for green vehicles in Singapore

Leading car manufacturers yesterday urged governments, particularly those in Asia, to play a key role in kick-starting the electric vehicle (EV) revolution. This means giving monetary incentives to encourage consumers to buy these green cars rather than traditional ones that run on fossil fuels. When the adoption of such vehicles becomes widespread, the incentives can be removed and costs of EVs would have decreased too, said experts at a panel discussion on the opening day of the Clean Energy Expo Asia.

EVs are considered more environmentally friendly as their greenhouse gas emissions are lower, while also addressing the issue of over-dependence on fossil fuels. French car maker Renault's Asean and Japan area operations manager Arnaud Mourgue said existing markets, such as Singapore's, need to provide significant incentives at the start for EVs to take off. Renault is in talks with the Energy Market Authority (EMA) and the Land Transport Authority (LTA) to bring in a fleet of these cars by this year for Singapore's EV pilot project.

Under a current government programme, the Transport Technology Innovation and Development Scheme (Tides), taxes are waived for electric cars, but only for companies and organisations. Private car owners are not included in this test phase. The Green Vehicle Rebate scheme was introduced in 2001 to promote green vehicles, which are more fuel-efficient and emit less air pollutants than conventional petrol and diesel ones. Currently, buyers of such vehicles enjoy 40 per cent off the Additional Registration Fee (ARF), the main car tax, on passenger vehicles.

While the government looks at new ways to encourage motorists to use these vehicles, buyers of green cars will get a tax break for another 12 months. The tax break on hybrid and electric cars will be extended till Dec 31 next year. On the other hand, compressed natural gas (CNG) vehicles will actually be removed from the scheme from Jan 1 next year.

With CNG cars being ineligible for the green vehicle rebate, two reactions have surfaced. In one camp are the detractors, who say this will sound the death knell for the sputtering CNG industry. In the other are proponents who believe that gas will still be cheaper than other fuels.

Source: *Straits Times*, 19 February 2011

Extract 4: Brazil: A front-runner in alternative powering of vehicles

The race around the world to develop an alternative fuel to petroleum is making great strides in Brazil. Already a market leader in the ethanol industry, Brazil is also leading natural gas developments, making its claim to be a front-runner in alternative powering of vehicles a strong one.

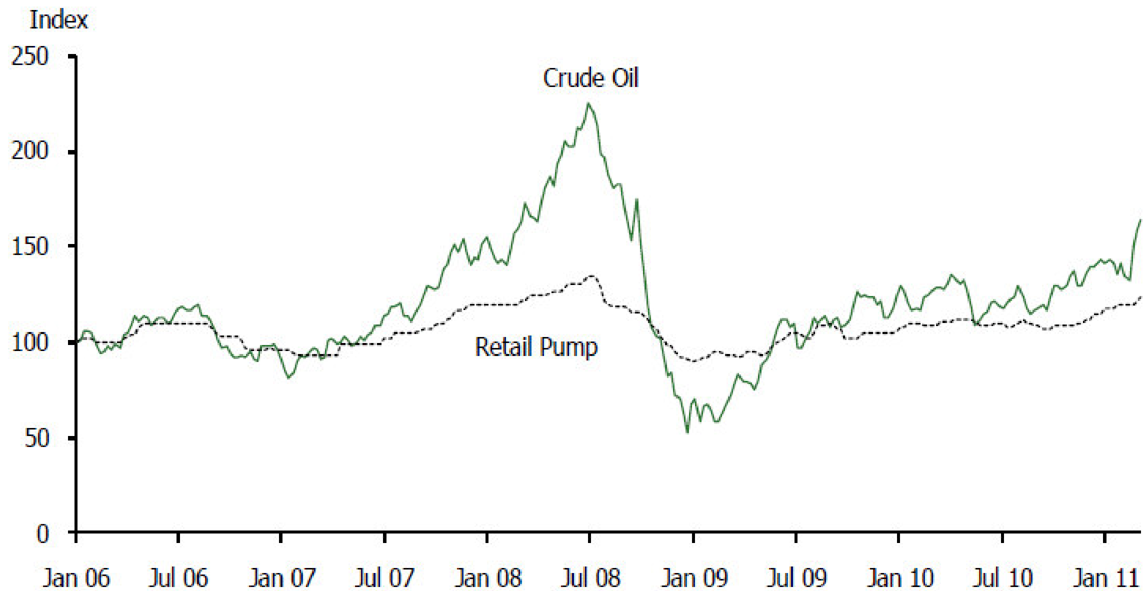
At the beginning of 2010, Brazil had over 1.5 million natural gas cars on the road and as of December 2010 12 million cars. The latest development is tri-fuel cars which can run on ethanol, petrol and natural gas, a common choice for taxis.

This is proving popular in Brazil as not only is natural gas a lot cheaper to use, but the conversion in Rio gets you a 75 percent reduction in annual vehicle registration (IPVA). In São Paulo the IPVA reduction is 25 percent.

With over 1,800 registered natural gas stations in Brazil, and with the price of petrol rising, natural gas stands out as the cheapest option. The average cost for natural gas was R$1.213 compared with R$2.538 for petrol with prices expected to rise for the latter.

Source: *Rio Times*, 12 April 2011

Figure 1: Movements of Crude Oil and Retail Pump Prices



Source: Petrolwatch and US Energy Information Administration

Questions

(a) **(i)** Compare the change in crude oil prices between January 2006 and July 2008 with the change in retail pump prices over the same period. [2]

(ii) Explain one possible reason why crude oil prices are more volatile than retail pump prices. [2]

(b) **(i)** Describe the type of market structure operating in the retail petrol industry in Singapore. [2]

(ii) Analyse the types of competition the petrol retailers might undertake. [6]

(c) Assess the ease with which a new player can enter the Singapore retail petrol market. [8]

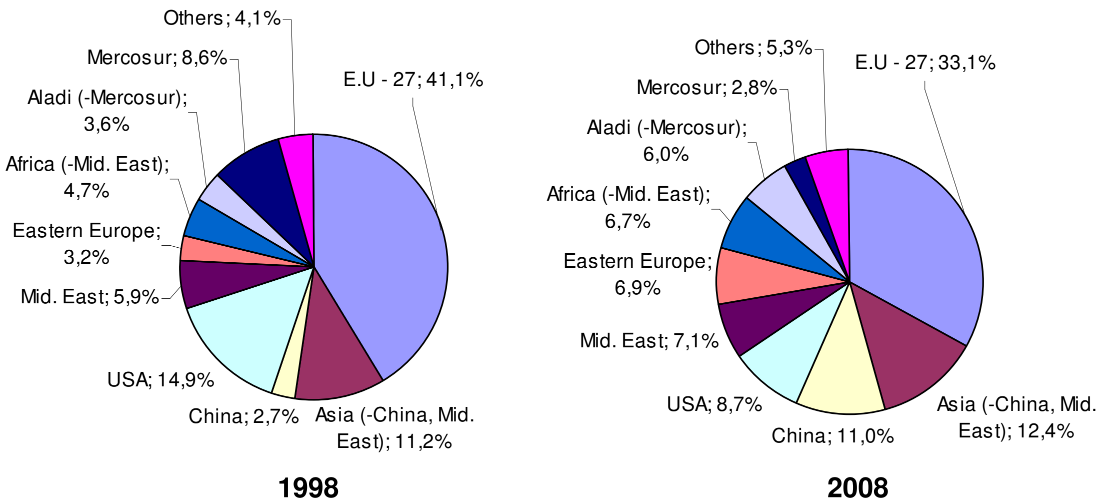
(d) Brazil is making great strides as a front-runner in alternative powering of vehicles. Assess whether the push for green vehicles by the Singapore government would be similarly successful. [10]

[Total: 30]

Question 2

Impact on Trade during Recession

Figure 2: Export Market of Brazil



Source: CIA World Factbook

Extract 5: The Brazilian Economy

Characterized by large and well-developed agricultural, mining, manufacturing, and service sectors, Brazil's economy outweighs that of all other South American countries and is expanding its presence in world markets. After record growth in 2007 and 2008, the onset of the global financial crisis hit Brazil in September 2008. Brazil experienced two quarters of negative growth, as global demand for Brazil's commodity-based exports dwindled and external credit dried up.

Source: *CIA World Factbook*

Extract 6: One way out – Government Spending

Barack Obama declared that only unprecedented government spending could prevent the deepening recession stretching for years into the future. The US President-elect said that the risks of ‘doing too little or nothing at all’ were even greater than those of allowing a federal deficit – already projected to reach the record figure of $1.2 trillion – to spiral on into the years to come. Mr Obama called on Congress to act quickly on his request to pump hundreds of billions of dollars into the American economy. ‘At this particular moment, only government can break the vicious cycles that are crippling our economy,’ Mr Obama said.

Source: *The Times*, 9 January 2009

Extract 7: The Rise of Trade Disputes

The US decision to slap tariffs on Chinese tyre imports - at the urging of US trade unions - has given a strong signal that the Obama administration is not prepared to put free trade at the top of its political agenda. But the US also has a hidden agenda in its aggressive trade move - its aim is to force China to open its own domestic markets further. President Obama has accepted the advice of his economics team that the US cannot borrow itself out of the recession this time, so it must export its way out. And opening up the Chinese market to US goods is essential to that strategy.

It is not just the US-China spat that is worrying observers. A disagreement between India and the US sparked the collapse of trade talks in Geneva last year. At the heart of the disagreement between the US and developing countries has been the reluctance of those countries to fully open their own markets to food imports from the West. India fears its smaller-scale farmers will be unable to compete with the sophisticated US agricultural machine. However, on the other side of the fence, the US and Europe say that if they are going to open their markets fully to agricultural products from developing countries, it is only fair that developing countries do the same. The main beneficiary of any agricultural liberalisation would be the bigger developing countries - Brazil, Argentina and South Africa - with very large and efficient agricultural sectors. However, they object to demands from the US and Europe that they fully open up their manufacturing sectors to Western imports as part of any trade deal. Brazil, which has built up a huge car manufacturing business behind trade barriers, is reluctant to take such steps, especially during a recession from which they have been largely immune.

Source: *BBC News*, 23 September 2009

Extract 8: Responses to the US tyre protectionism

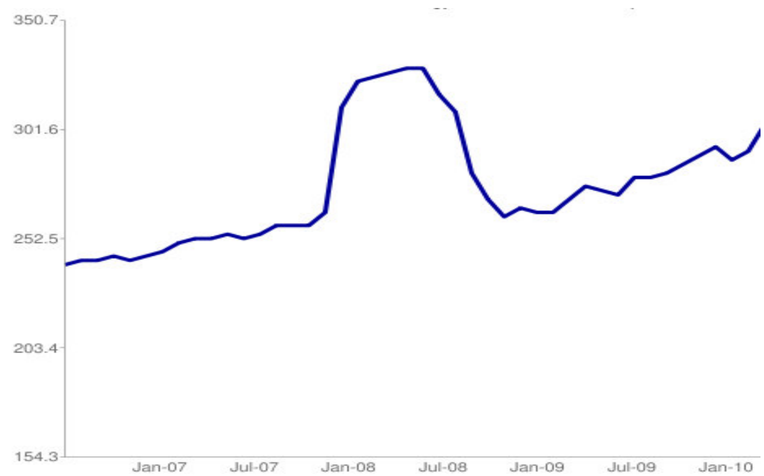
China strongly opposes a US decision to impose special protectionist tariffs on tyre imports from China. According to Los Angeles Times report, the US would add a duty of 35 percent in the first year, 30 percent in the second and 25 percent in the third on passenger vehicle and light-truck tyres from China.

The Ministry said that the US lacked bases for the case because tyre products exported to the US from China had actually declined 16 percent in the first half of this year, compared to the same period last year. China's tyre exports to US in 2008 only rose 2.2 percent from 2007.

The tariffs were also strongly opposed by US tyre distributors and retailers, who said the restrictions would raise prices, hurting cash-strapped consumers. ‘For the past 15 years, major US producers had focused on higher profit and better performing tyres instead of what industry insiders call “tier three tyres" that service lower end and second-hand automobiles.’ said Jim Mayfield, president of Del-Nat Tyre Corp., which sells private-label tyres, including Chinese-made imports.

Source: *China Daily*, 12 September 2009

Figure 3: Non-energy Commodities Index Price Chart (2000 = 100)



Source: World Bank

Questions

(a) **(i)** Using Figure 2, describe the changes in Brazil exports to the US and that of China between 1998 and 2008. [2]

(ii) Suggest a reason why the above would continue in 2009. [1]

(b) Explain the impact of the global financial crisis could have on the commodity markets. [5]

(c) Compare the underlying success factors for Brazil's large car manufacturing business and her large agricultural sector. [6]

(d) Discuss the view that the government can break the vicious cycles that are crippling the economy and analyse how this government spending can affect the current and future standards of living. [8]

(e) With reference to the data where appropriate, assess the validity of the bases for the imposition of tariffs on the Chinese tyre imports. [8]

[Total: 30]