NYJC	PRELIMINARY EXAM 2008 Economics JC 2 H2 (9732)

Paper 1 - Case Study

Tuesday
16 Sep 2008
1400 - 1615

Total Marks: 40%

TIME 2 hour 15 mins

INSTRUCTIONS TO CANDIDATES

Do not open this paper until you are told to do so.

Write your name, class and name of economics tutor in the space provided on the writing paper.

Answer **all** questions. The number of marks is given in the brackets at the end of each question. Write your answers on the writing papers provided. If you use more than one sheet of paper, fasten the sheets together.

You are advised to spend several minutes per question reading through the data before you begin writing your answers.

There are 7 printed pages including this cover page

Question 1 Oil and Its Effects

Extract 1: Oil hike reaches ‘tipping point’

Last week the price of oil hit a new high of US$135 (RM434) a barrel, causing alarm bells to go off. The oil price is now six times higher than in early 2002. The oil price has reached the “tipping point” at which it is deeply affecting economies as a whole in many ways.

The oil price trend is expected to continue “as confidence that supplies can meet demand in the next five to ten years crumbled”, according to a *Financial Times* report.

One positive point amid all the gloom is that this rising oil price is making renewable energy sources such as wind and solar more and more viable. If these can take an increasing share of the energy market, that will be good for the fight against climate change.

Source: The Star Online, 26 May 2008

Table 1: Exposure of Asian economies to oil in 2007

	Oil Export		Oil Import		Oil trade balance
	% of exports	% of GDP	% of imports	% of GDP	% of GDP
Malaysia	8.9	8.4	8.0	6.3	2.1
Singapore	17.7	32.8	21.1	34.3	-1.5
Indonesia	11.0	2.9	29.4	5.1	-2.2
China	1.0	0.4	10.3	3.0	-2.6
Hong Kong	0.2	0.3	2.6	4.6	-4.3
Thailand	3.7	2.3	15.6	8.8	-6.5

Source: CEIC, CIMB/CIMB-GK Research, 2007
Note: Oil is defined as petrol and petroleum products

Extract 2: Petrol sales fall as drivers feel the pinch

British motorists are shunning their cars and clearly driving less following a doubling in crude oil prices over the past year, the International Energy Agency said on Tuesday.

Petrol retailers have disclosed that volume of fuel sales has slumped by as much as 20 per cent over the past 12 months.

According to the IEA, motorists are instead choosing to take public transport as their cars become too expensive to run. The analysis provides some of the first hard evidence that motorists are realising that they have to change their behaviour in response to the sharp rise in petrol prices.

Source: The Guardian, 11 June 2008

Extract 3: EU tackles aircraft CO2 emissions

Aircraft produce about 3% of EU CO2 emissions - more than refineries or steel plants
They also emit nitrogen oxides which lead to the formation of another greenhouse gas, ozone.

Airlines operating in the EU should pay for any increase in their carbon emissions above current levels, the European Commission has proposed. Commissioners called on the industry to make a "fair contribution" to the fight against climate change.

Flight tickets will become more expensive when airlines join a programme that forces companies to pay for the air pollution they cause. The 25-nation EU bloc has endorsed the idea of limiting airline carbon dioxide emissions to counter global warming.

The Sustainable Aviation group, which includes British Airways, Virgin Atlantic, Airbus UK and BAA, the airports operator, admits that improvements in efficiency will not keep pace with the rising number of flights.

Roger Wiltshire, the chairman of the group, said: "Growth in demand for air travel may well exceed growth in technology's ability to offset emissions." Greenhouse gas emissions from aircraft will double by 2030 even if airlines invest in new fuel-efficient planes, the industry predicted yesterday. Any savings in average emissions per flight will be eclipsed by the huge growth in air travel forecast for the next 25 years.

Mr Wiltshire rejected calls for environmental taxes on flights, describing them as a "blunt, inappropriate and ineffective weapon". But the group admitted that airlines were unlikely to find an alternative to fossil fuels to power aircraft for several decades.

Source: The Times, 21 June 2005

(a) Using the data in Table 1, identify the economy that is a net exporter of oil. Explain your choice. [2]

(b) (i) In the light of Extract 1, explain the factors that might cause the expected change in oil prices in the next five years. [4]

(ii) Explain the likely impact of the price change identified above on the inflation rate and real GDP of Indonesia. [4]

(c) (i) Using Extract 2, calculate the price elasticity of demand for fuel. [1]

(ii) Compare how rising oil prices will affect the market for renewable energy sources and the market for cars. [5]

(d) Using economic theory, explain why the European Commission suggested that the airline industry must make a 'fair contribution' to the fight against climate change. [6]

(e) Airlines have to pay an environmental tax for the carbon dioxide emissions their aircrafts produce.
To what extent do you agree that such a tax is most effective in reducing global warming? [8]

[Total : 30]

Question 2 The Economies of China and India

<u>Table 2: FDI Overview: India and China</u>

	India		China	
	FDI Stock (millions US$)	FDI as Per Cent of GDP	FDI Stock (millions US$)	FDI as Per Cent of GDP
1980-1981	452	0.2	1,074	0.5
1990-1991	1,657	0.5	20,691	5.8
2000-2001	17,517	3.7	193,348	17.9
2002-2003	30,827	5.2	228,371	16.2
2004-2005	38,676	5.9	245,467	14.9

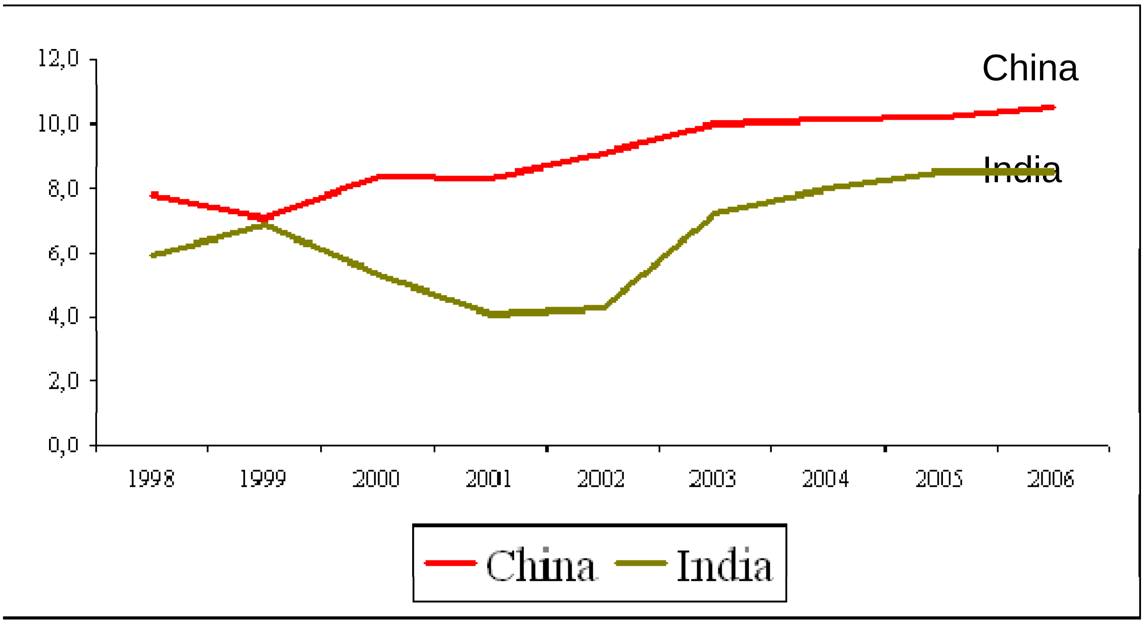
Note: Gross Domestic Product (GDP).
Source: UNCTAD World Investment Report, 2006.

<u>Table 3: Average Annual Growth of Exports of Goods and Services, 1990-2004 (in %)</u>

	1990-2000	2000-04
China	13.0	24.2
India	12.3	12.0
LMIC (1)	7.3	10.1
World	7.0	5.0

(1) LMIC: low- and medium-income countries.
Source: World Bank *WDI 2006*, table 4.9.

Graph 1. GDP Growth Rates in China and India, 1998-2006



Extract 4: China vs India: FDI magnet

India has emerged as the second hottest FDI destination of the world, next only to China base on the United Nations Conference on Trade and Development's (Unctad) World Investment Prospect for 2007- 09.

One of the key factors that favoured China as an FDI destination was the emerging need for "relocation of manufacturing operations" by multinationals to improve cost competitiveness. Foreign companies invest in China, produce goods at lower costs and re-export to their own countries to counter the growing price competition in their domestic markets. Also, China continues to provide favourable environments to attract FDI, joint ventures, and trade partners, with a lot of preferential treatment.

However, the FDI trend in the world is changing. With the focus turning to the services sector, especially IT, there is a big opportunity for India to attract more FDI. Nearly half of the country's growth is driven by the services sector, which needs huge investments to raise itself to global standards.

Already, telecommunications and computer software have become the main sectors for FDI in the country. In 2003, about a fourth of the FDI approved was in these segments.

Adapted from *Why China Wins Race in FDI*. (http://www.thehindubusinessline.com) and *United Nations Conference on Trade and Development's (Unctad) World Investment Prospects for 2007-09*

Extract 5: China and India's Demand for Oil

China and India are largely responsible for the world's skyrocketing oil prices. Their dazzling economic growth is increasing their consumption of fossil fuels considerably. The two countries are to be found on all the fronts of the new wars over black gold.

The past three years were marked by a steady rise in commodity prices, especially those of fossil fuels. The barrel of crude oil appreciated 40% between September 2004 and September 2006, when it was selling for US$65. The tensions surrounding these prices are maintained by several factors, such as the chaotic situation in the Middle East, political instability in Venezuela and Nigeria, under-investment in refining capacity, and even speculative anticipation. However, this oil crisis in the making is explained above all by China and India's economic development. These two countries are responsible for more than a third of the increase in global consumption since 2000. Today, China and India, which are respectively the world's second and sixth leading oil consuming countries, are in worrisome situations, because their dependence on oil imports continues to strengthen. China has been importing oil since 1993 and the share of its purchases abroad in total consumption has risen from 30% in 2000 to 50% today. The situation in India is just as worrying. Although this country continues to be very poor (its total fleet of automobiles is only one third of China's), 70% of the oil that is used there comes from abroad. When it comes to the ranking of world oil importers, China comes third, after the United States and Japan, while India is already 9th in the list.

Oil prices still matter to the health of the world economy. Higher oil prices since 1999 contributed to the global economic downturn in 2000-2001 and are dampening the current cyclical upturn: world GDP growth may have been at least half a percentage point higher in the last two or three years had prices remained at mid-2001 levels.

Adapted from *China and India: An all-out oil strategy.* **(Ellipses, 2006).**

Extract 6: Challenges of Change

The emergence of China and India presents Asia with challenges as well as opportunities. It has intensified competition, and forced other countries to adapt to a radically changed situation. Countries with low wages and surplus labour, like Vietnam and Indonesia, feel the heat directly because they occupy the same niches in the international economy as China and India. Hence, Vietnam is accelerating its economic reforms, preparing to join the WTO, and pushing hard for growth and investments. Indonesia is setting up Special Economic Zones (SEZs) to create a more conducive investment environment, especially in the Riau islands near Singapore, where Singapore is able to work with Indonesia and help to promote the SEZs to investors.

Even more developed countries like Singapore feel similar pressures. In these countries, at the high end of the workforce, entrepreneurs and skilled professionals are benefiting from the many opportunities opening up all over Asia. But at the lower end, less skilled workers are seeing their wages stagnate, like less-skilled workers elsewhere. But the pressure extends well beyond the least skilled workers. China and India are moving up the value ladder, and growing their scientific and technological prowess. Chinese universities now lodge as many patents in China as American universities lodge in the US. India's outsourcing industry not only processes credit cards and airline reservations, but also interprets medical scans and researches legal precedents. The end result is an accelerating pace of change and a widening of income disparities. The countries are being forced to restructure and upgrade, or else be overtaken and hollowed out.

Speech By Mr Lee Hsien Loong,Prime Minister, at the Lloyd's City Dinner, 7 September 2006, 9.30 pm at the Merchant Taylors Hall, London

a (i) Compare the trend of FDI as a percentage of GDP for China and India. [2m]

(ii) Account for the trend above. [4m]

b (i) Describe the trend in GDP growth rate for India between 2000 and 2004. [2m]

(ii) To what extent is the data provided sufficient to explain this trend? [6m]

c Using the data provided, discuss whether the emergence of India and China poses a challenge to more developed countries like Singapore. [8m]

d. As the economic advisor to the Singapore government, discuss the policies you would recommend to ensure that the Singapore economy remains competitive. [8m]

[Total: 30]