	Class	Adm No
Candidate Name:		



# **Promotional Exam 2008**

Pre-university 2

# H1 ECONOMICS 8816 PAPER 1

8816/01

Tuesday 9 September 2008 3 hours

Additional materials: Answer paper

## **READ THESE INSTRUCTIONS FIRST**

Write your name, class and admission number in the spaces at the top of this page and on any separate answer paper used.

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.

#### Section A

Answer **all** questions.

#### Section B

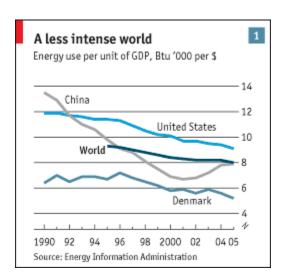
Answer **one** question

At the end of the examination, answers to Case Study Questions 1, 2 and the essay question will be collected separately.

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

## **Question 1 Energy Conservation**

Figure 1: Energy efficiency



### **Extract 1: The elusive negawatt**

Whereas the burning of fossil fuels releases greenhouse gases, which contribute to global warming, and nuclear plants generate life-threatening waste, the only by-product of energy efficiency is wealth, in the form of lower fuel bills and less spending on power stations, pipelines and so forth. No wonder that policy makers now tend to prefer "negawatts" to megawatts as the best method of slaking the world's growing thirst for energy.

The Intergovernmental Panel on Climate Change, a group of scientists advising the United Nations on global warming believes that profitable energy-efficiency investments would allow Pakistan to cut its emissions by almost a third, Greece by a quarter and Britain by more than a fifth.

In other words, big investments in energy efficiency would more than pay for themselves, and fairly fast. Although a lot of money would have to be spent—\$170 billion a year until 2020. Moreover, with ample profits to be made, financing should be easy to attract.

The problem, analysts explain, is a series of distortions and market failures that discourage investment in efficiency. Often, consumers are poorly informed about the savings on offer. Even when they can do the sums, the transaction costs are high: it is a time-consuming chore for someone to identify the best energy-saving equipment, buy it and get it installed. It does not help that the potential savings, although huge when added up across the world, usually amount to only a small share of the budgets of

individual firms and households. Despite recent price increases, spending on energy still accounts for a smaller share of the global economy than it did a few decades ago.

Similar stories crop up in the markets for new homes and offices, appliances and vehicles. Builders are not the ones who end up paying the utility bills, so have little reason to add to the construction costs—and hence the price of a home or office—by incorporating energy-saving features. The makers of appliances and cars also know that not all consumers and drivers will think as carefully about running costs as about the purchase price. By the same token, landlords have scant incentive to invest in energy efficiency on their tenants' behalf. And power companies are usually keen to encourage their customers to consume as much power as possible.

Financing energy-efficiency investments can also be difficult. In the developing world, capital can be scarce. In rich countries, the savings from making individual homes more efficient are too small and the overheads involved too high to be of much interest to most banks.

Source: The Economist, 8 May 2008

### Extract 2: First-ever carbon trading deal signed in Singapore

A Singapore-based company, ecoWise, has tied up with Japan's Kansai Electric Power Company to tackle climate change.

Under the four-year deal, the first to be signed in Singapore, ecoWise will trade carbon credits for Kansai, Japan's second largest power firm.

Carbon trading is a market-based mechanism to help mitigate the increase of carbon dioxide in the atmosphere.

Countries, which have signed the Kyoto Protocol, are legally bound to meet emissions targets by 2012.

The Kyoto Protocol is designed to cut greenhouse gas emissions by making the polluter pay for climate change.

A country that needs to fulfil its obligations may need to buy spare credits from another country that is on track to meet its target.

But industry players said there are more emission reduction projects coming on-stream in countries like Malaysia, Indonesia and Vietnam, and the sector is set to grow.

However, the rate of adoption will depend on the level of confidence and awareness of how carbon credits can benefit businesses.

Source: Channel NewsAsia, 5 Nov 2007

## **Extract 3: Sustainable Singapore**

To help residents make energy efficient choices in their daily lives, National Environment Agency (NEA) has introduced various initiatives below.

Mandatory energy labelling informs consumers of the energy efficiencies of different models of an appliance. Green Buildings form an integral part of sustainable development as the building sector account for about 30% of the total electricity consumption in Singapore. In May 2007, NEA launched the 10% Energy Challenge, a national campaign to raise awareness among households on how they can save at least 10% of their home electricity use by adopting simple energy-saving measures at home.

Source: Ministry of the Environment and Water Resources, Singapore 26 July 2008

#### Questions

(a) (i) With reference to Figure 1, account for the trend in energy use between 1990 and 2005. [4]

(ii) Using Extract 1, explain two possible obstacles to energy efficiency. [4]

(b) (i) Identify the sources of market failure mentioned in Extract 1 [2]

(ii) Using a diagram, explain why one of the sources identified in b (i) is an example of market failure. [4]

(c) Using Extract 2, assess the desirability of carbon trading. [6]

(d) Comment on the possible measures that Singapore may undertake to reduce energy consumption and combat global warming. [10]

[30 marks]

#### **Question 2** Economic Performance

### **Economic indicators among selected countries**

Table 1

2007	China	USA	Malaysia	Singapore
Population (m)	1,321.3	301	27.2	4.5
GDP (US\$)	3,241.8 bn	13,841 bn	186,720 m	161.3 bn
GDP per head (US\$)	2,453	45,963	13,210	35,956

Table 2

Historical averages	China	USA	Malaysia	Singapore
(%) 2003 – 07				
Population growth	0.6	0.9	1.6	1.4
Real GDP growth	10.8	2.9	4.8	7.1
Real domestic				
demand growth	9.4	2.9	5.9	4.8
Inflation	2.6	2.9	2.0	1.1
Current-account				
balance (% of GDP)	5.6	-5.6	14.1	24.8
FDI inflows (% of				
GDP)	3.0	1.0	3.4	15.5

Source: The Economist Intelligence Unit, 16 Jun, 3 Jul, 19 Aug 2008

#### Extract 1: China and the surge in global inflation

Many people in America and Europe think that the recent surge in inflation, like almost everything else these days, is "made in China". For a number of years, cheap Chinese goods helped to reduce prices in rich economies, but more recently wages and prices have surged in China. On top of this, the hungry dragon's insatiable appetite for food, energy and other raw materials has given cartoonists an emotive image for the surge in global commodity prices. As a result, it is claimed, China is no longer exporting deflation to the rich world, but inflation.

China's inflation rate did indeed hit almost 9% earlier this year (by July it had fallen to 6.3%). And after declining for several years, the prices of America's imports from China jumped by 5.3% in the year to July, pushing up the prices of goods in Wal-Mart, where many Americans shop. However, import prices from China are rising more slowly than the cost of goods from elsewhere: the average price of manufactured goods imported into America from industrialised countries rose by 10.1% over the past year.

Source: The Economist print edition, Aug 14 2008

## Extract 2: Asia's inflationary winners and losers

As cost-push inflationary pressures course through Asia's oil-importing economies, some countries are better placed than others to meet the rising macroeconomic challenge presented by spiraling global oil prices, which hit a record high of US\$147 per barrel this month.

How individual governments respond in the coming months will separate the region's economic winners from losers and likely determine whether the global economy is headed for a hard or soft landing in light of the US's mounting financial and economic troubles.

The region's economies have maintained strong growth momentum in the first half of this year. Accommodating monetary policy has played a significant role in many countries' growth, as has an unexpected surge in Japanese and European demand for Asian exported to offset the slump in the US.

That's expected to change in the months ahead, however, as external demand in the US, Europe and Japan is expected to weaken and the loss of export income begins to crimp local economies' growth. Across Asia, central bankers find themselves on the horns of a crucial policy in how to calibrate growth and stability.

Source: Asia Times Online, Jul 22 2008

### **Extract 3: The wages of sin**

Prudence and virtue do not always receive their just desserts. Earlier this year, the prospects for the euro area's economy seemed, if not bright, then less dim than for some other parts of the rich world. High oil prices and scarcer credit were bigger worries for gas-guzzling, debt-ridden America than for the high-saving, fuel-efficient countries of continental Europe.

Things have turned out a little differently. America's economy has held up surprisingly well so far this year—helped, to be fair, by a big fiscal and monetary stimulus. Meanwhile the euro area, after a strong start, is sailing close to recession. GDP figures due to be published on August 14<sup>th</sup> are likely to show that the economy stagnated, or perhaps even shrank, in the second quarter.

Business confidence has fallen sharply across the euro zone, according to a monthly European Commission survey published on July 30<sup>th</sup>. A closely watched activity index, which combines surveys of purchasing managers in services and manufacturing, fell to its lowest level since 2001. The gauge for France is pointing to a fall in output. Germany's economy is now barely growing. Italy and Spain were already shrinking fast in June.

Source: The Economist print edition, Jul 31 2008

# Questions

(a)	Usi	ng Tables 1and 2:	
	(i)	Explain which country had the highest standard of living. [2]	]
	(ii)	Comment on the economic performance of China compared to that of the USA. [3]	]
(b)		lain how a government's response to cost-push inflationary pressures could ke them economic winners or losers.  [5]	]
(c)	Exp	olain why 'America's economy has held up surprisingly well so far this year'. [6]	]
(d)		lain the factors that could cause the European economies to stagnate and grecession.  [6]	
(e)		cuss whether or not China should be blamed for the surge in global inflation [8	]
		[30 marks	]

## **Section B**

## Answer **one** question from this section

(a) Explain how merit and demerit goods are different from public goods. [12]
(b) Discuss the policies that a government might use to achieve a more efficient allocation of resources where demerit goods exist in markets. [13]
4 (a) Explain the key macro-economic aims of the Singapore government. [10]
(b) Discuss which policy measures might best be used to overcome the most significant macro-economic problem currently faced by the Singapore

[15]

economy.

#### **END OF PAPER**