VICTORIA JUNIOR COLLEGE

2008 JC2 PRELIMINARY EXAM

H2 ECONOMICS – PAPER NO. 9732/01

15 September 2008 2:00 – 4:15 pm

READ THESE INSTRUCTIONS FIRST

Write your name and class on all the work you hand in.
Write in dark blue or black pen.
You may use a soft pencil for diagrams.
Do not use staples, paper clips, glue or correction fluid on the work that you hand in.

Answer **all** questions.

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

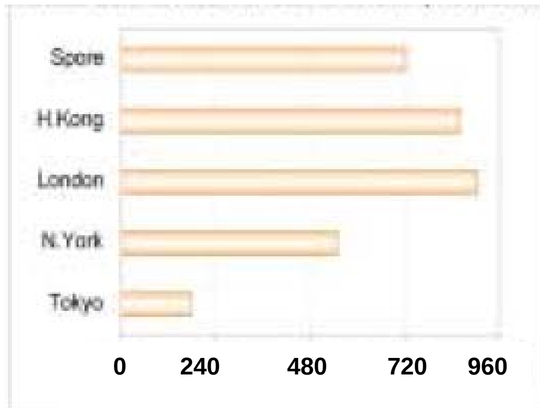
At the end of the examination, fasten your work securely, **by question**, <u>using the strings provided.</u>

This document consists of **7** printed pages.

Answer **all** questions.

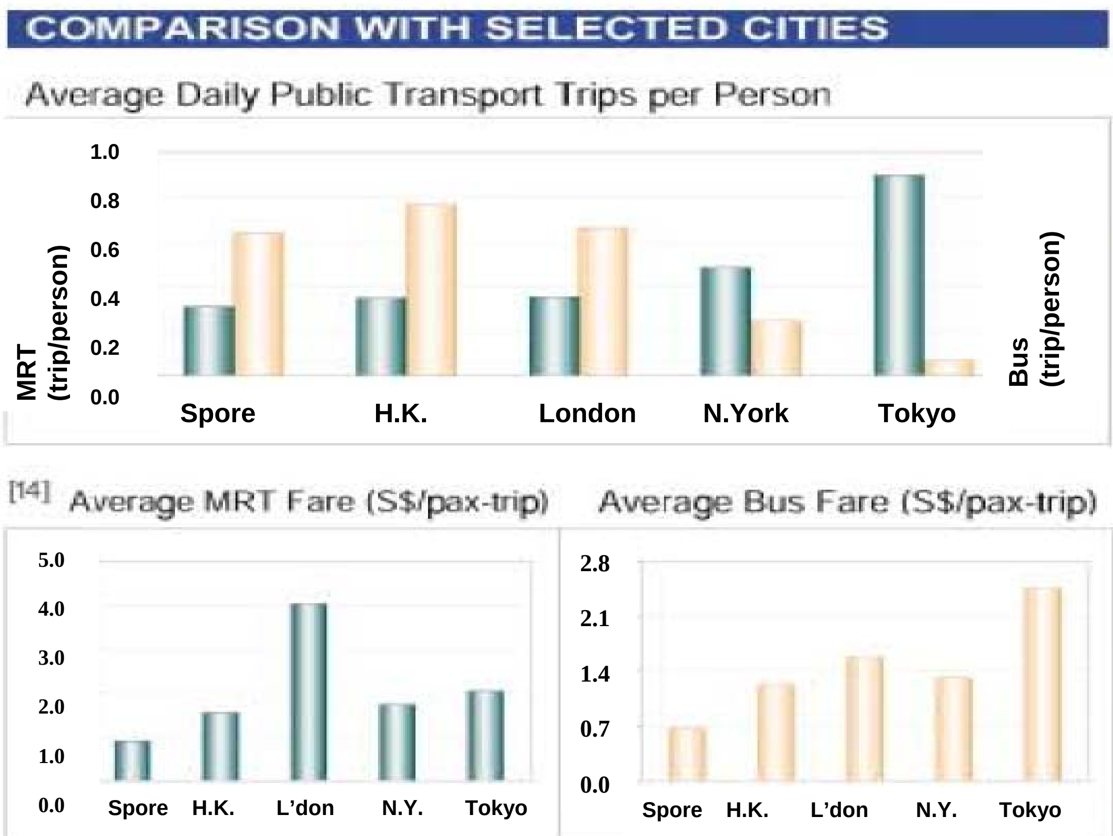
Question 1: Ensuring Smooth Flowing Roads

Chart 1 Public Bus Fleet / million persons (2006)



Source: Ministry of Transport, Singapore

Chart 2



Note: The MRT system is compared with MTR in Hong Kong, London Tube, Subways in New York City and Tokyo. Figures are for year 2005, converted to Singapore dollars using average exchange rate in year 2005.

Source: Ministry of Transport, Singapore

Extract 1

Increasing road capacity and deploying traffic engineering measures will not in themselves guarantee smooth flowing roads. Additional lanes and new roads attract more traffic and congestion soon returns.

The insatiable appetite for more cars has led to an uphill battle against gridlock in many cities. In fast growing economies like China, the car population grows at more than 20% a year and peak-hour traffic in mega-cities like Beijing and Shanghai crawls at 5km an hour. In the United States, motorists spent more than 4.2 billion hours stuck in jams, enough time to use up enough extra fuel to fill 58 super tankers. The "congestion invoice" in the US stands at some $78 billion each year while congestion costs are estimated to be about 1% of GDP in European countries such as Britain and France.

Singaporeans desire to own cars and policies like the use of Electronic Road Pricing (ERP) to manage traffic have made it possible for many Singaporeans to do so. The vehicle population has grown steadily to the 850,000 vehicles today. With rising affluence, not only are more Singaporeans owning cars, they are also using them more intensively. While the number of cars increased by 10% between 1997 and 2004, the number of car trips increased by 23%. Congestion levels have increased by about 25% since 1999, with more roads congested during the peak hours.

The reality of Singapore's situation is that it is a compact city state with 12% of its land already used up for roads. While roads continue to be built, the pace of road expansion will slow down from 1% a year over the last 15 years, to 0.5% a year over the next 15 years.

Extract 2

There are three inescapable conclusions.

(i) As more Singaporeans own cars, it is clearly not possible for all of them to drive their cars to and from work every day.
(ii) The more cars Singaporeans own, the more extensive ERP coverage and the higher the charges would have to be.
(iii) Even with more extensive ERP, the current vehicle growth rate of 3% is not sustainable, given the already large vehicle population and the slowdown in road growth. The vehicle population growth rate will be decreased from the current 3% to 1.5% from May 2009.

These are not easy issues but there is a need to act decisively to manage car growth and usage to ensure that Singaporeans will continue to enjoy a quality living environment. The bus priority measures such as bus lanes to be implemented by June 2008 will help reduce waiting and journey times. In addition, we will (i) increase frequencies of basic bus services, including feeder services; (ii) allow basic bus services to duplicate parts of the rail network and (iii) expand premium bus services to provide more choices.

Frequency and capacity of our trains will also be improved for a more comfortable ride and a reduction in waiting time by about 10-15% during peak hours. The rail industry will also be strengthened to enhance efficiency and cost competitiveness. There are currently two rail operators and this enables the regulator to benchmark the operators against each other in terms of service standards and cost efficiency. There have been suggestions to merge the separate rail operations to reap greater economies of scale. Others see value in retaining the existing structure. A key step in enhancing contestability is to have shorter operating licenses, say 10 to 15 years, compared to the existing 30-year license periods. This policy does not increase the number of operators but the existing ones are subjected to renewals of their licences. A new operator may take over the existing one(s), if the latter does not perform according to government's standards.

Besides vastly improving public transport, the ERP system will also need to be enhanced. Many other cities such as London and Stockholm are coming to the same conclusion that there is no choice but to introduce congestion charging on heavily used roads. Without ERP, Singaporeans would be spending many hours in traffic snarls, just like people in Tokyo, Los Angeles and many other US cities, who pay for congestion with the time that they have lost, stuck in traffic gridlock.

Our ERP system has served us well, but it is coming under strain. We often hear feedback that ERP has not helped to ease congestion on the highest demand roads like the CTE beyond a temporary respite; that ERP rate increases have little impact on travel behaviour; and that even though people pay ERP, they still face congestion on priced roads. There is some truth in this. The reason is that rising affluence has led to a greater propensity to drive which in turn has caused a dramatic rise in traffic volumes; so much so that the scale and intensity of traffic congestion today is far different from what it was a decade ago. Increasingly, given the more pervasive congestion today, the emphasis must be on encouraging motorists to shift to public transport, rather than drive on alternative roads to their destination. This is why the Government is spending billions of dollars to improve our public transport system to make it a viable alternative to the car.

Source: Adapted from Speech by Mr. Raymond Lim, Minister for Transport, 18, Jan 2008 and 30 Jan 2008

Questions:

(a) Using demand and supply analysis, explain why road congestion will worsen in Singapore. [4]

(b) (i) Explain the type of externality mentioned in Extract 1. [2]

(ii) Explain why congestion may be viewed as a source of market failure. [5]

(c) With reference to the data, account for the difference in public transport ridership in Singapore and Tokyo. [4]

(d) Evaluate the effectiveness of only using electronic road pricing as a means of controlling congestion levels on existing roads. [8]

(e) i) Explain the meaning of market power. [1]

ii) Discuss the economic implications of having shorter operating licenses in the rail industry. [6]

Total: 30m

Question 2: The "Stagflation" Disease

Extract 1

It's a toxic economic mix the nation hasn't seen in three decades: Prices are speeding upward at the fastest pace in a quarter century, even as the economy loses steam. Economists call the disease "stagflation," and they're worried it might be coming back.

The economy nearly stalled in the final three months of last year and probably is barely growing or even shrinking now. That's the "stagnation" part of the ailment. Typically, that slowdown should slow inflation as well -- the second part of the diagnosis -- but prices are still marching higher.

Once the twin evils of stagflation take hold, it can be hard to break the grip. People cut back on their spending as they are stung by rising prices and shrinking wages. Businesses, also smacked by rising costs and declining demand from customers, clamp down on their hiring and capital investment.

Since last summer, the housing slump has worsened, credit problems have intensified and the job market has deteriorated. This combination of bad news has made people and businesses more cautious about spending and investing — further weakening the economy.

To brace the teetering economy, the Federal Reserve Chairman Ben Bernanke and his colleagues have been reducing its interest rate since September 2007 with the biggest one-month reduction in a quarter-century in January of 1.25 percentage points. However, to combat inflation, the Fed would be expected to boost rates instead.

"The Fed has its hands full. It is preoccupied with the economic slowdown at the front door, but inflation looks to be sneaking in the back door," said Greg McBride, senior financial analyst at Bankrate.com. "If that trend continues, the Fed would need to show the economy some tough love, meaning higher interest rates to keep inflation from getting out of hand."
On the other hand, Brian Bethune, economist at Global Insight, said Bernanke can fight only one war at a time, and the more pressing issue right now is to shore up the ailing economy. "That's the war that needs to be fought. The war on inflation will have to come another day," Bethune said.

Maybe things won't be so bad. Federal Reserve vice chairman Donald Kohn said in a speech that he doesn't expect the recent elevated inflation readings to persist.

People are weathering the economic storms. Earlier this month, nervous shoppers handed the nation's retailers their worst January in almost four decades. High oil and food prices, the toll of the housing bust, the credit crunch and a tougher job market all were to blame. Disappointing sales were widespread, hitting discounters like Wal-Mart Stores Inc. and upscale merchants like Nordstrom Inc. Sales of new homes fell in January for a third straight month. Orders to factories for big-ticket manufactured goods dropped in January by the largest amount in five months.

Wary employers eliminated jobs in January, the first nationwide loss of jobs in more than four years. With the economy on the edge of a recession -- if it hasn't toppled over already -- the Fed for the near term is much more likely to keep lowering rates.

Bernanke said at some point this year, the Fed will need to "assess whether the stance of monetary policy is properly calibrated" to foster the Fed's objectives of price stability "in an environment of downside risks to growth." He was hopeful that previous rate reductions and the

$168 billion economic aid plan of tax rebates for people and tax breaks for business would energize the economy in the second half of 2008.

Bernanke was asked when he thought the housing market might stabilize. It's possible, he said, that by "later this year it will stop being such a big drag directly" on the economy. But home prices probably will decline into next year, he added. "It is very difficult to know, and we've been wrong before," Bernanke said.

Even as the Fed tries to shore up the economy, it must remain mindful of inflationary pressures, Bernanke said. Oil prices, which have set records, briefly shot past $102 a barrel on Wednesday. Prices eased later but still remain close to $100 a barrel.

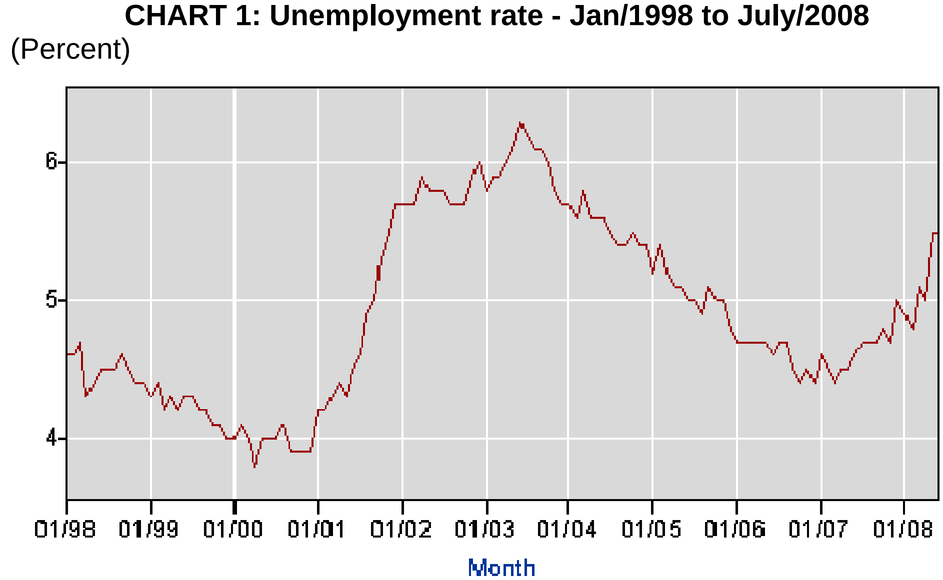
"Should high rates of overall inflation persist," Bernanke said, "the possibility also exists that inflation expectations could become less well-anchored." If people think inflation is escalating, they will act in ways that could make things even worse, a sort of self-fulfilling prophecy. Bernanke said that could complicate the Fed's job of trying to nurture growth while also keeping inflation under control.

If oil prices continue to skyrocket this year, it would be "hard to maintain low inflation," Bernanke acknowledged.

Can a serious bout of stagflation be avoided? Many economists believe the Fed's aggressive rate cuts along with tax rebates for people and tax breaks for businesses will lift the economy in the second half of the year.

Adapted from: Bernanke signals yet another rate cut despite inflation worries, Fed chief focuses firmly on ailing economy, Associated Press, 27 Feb 2008; Worries grow for worse 'stagflation', Associated Press, 26 Feb 2008.

CHART 1: Unemployment rate - Jan/1998 to July/2008



Source: U.S. Bureau of Labor Statistics, www.dls.gov

TABLE 1: Intended federal funds rate												
Change Occurrence and Level (percent)												
Year	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
2001												1.75
2002											1.25	
2003						1.00						
2004						1.25		1.50	1.75		2.00	2.25
2005		2.50	2.75		3.00	3.25		3.50	3.75		4.00	4.25
2006	4.50		4.75		5.00	5.25						
2007									4.75	4.50		4.25
2008	3.00		2.25	2.00								

Source: Federal Reserve, www.federalreserve.gov

TABLE 2: Index of Consumer Sentiment, Quarterly(Q)				
Year	**Q1**	**Q2**	**Q3**	**Q4**
2001	92.3	91.0	88.6	85.1
2002	93.1	94.1	87.3	83.8
2003	80.0	89.3	89.3	92.0
2004	98.0	93.3	95.6	93.9
2005	94.1	90.2	87.5	82.4
2006	88.9	83.8	84.0	92.5
2007	92.2	86.9	85.7	77.5

Source: Reuters / University of Michigan Surveys of Consumers, www.sca.isr.umich.edu

Questions:

(a) (i) Describe the trend in unemployment rate for the period between Jan 2001 and Jan 2007. [2]

(ii) Compare the trend in unemployment rate and federal funds rate for the same period and suggest a possible reason for the relationship. [2]

(iii) Explain the relationship between unemployment rate and consumer sentiment for the year 2007. [2]

(b) With the aid of a diagram, explain the likely causes of a possible stagflation in the US. [6]

(c) How effective is the lowering of interest rate in fighting recession? [8]

(d) As the economic advisor to the government, evaluate alternative policies to combat the “twin evils of stagflation”. [10]

Total: 30m

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