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DUNMAN HIGH SCHOOL

Preliminary Examination

Year 6

Economics

8819/1

Higher 1

19 September 2011

Section A Case Study

3 hours

Section B Essay

Additional Materials:

Writing Papers

READ THESE INSTRUCTIONS FIRST

Write your name and class 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.

Section A

Answer **all** questions.

Section B

Answer **one** question.

At the end of the examination, fasten all your work securely into two separate bundles for Section A and Section B.

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

Section A		Section B	
Q1	Q2	Q3	Q4

This document consists of **8** printed pages including this cover page.

[Turn over

Section A

Answer **all** questions in this section

Question 1 The Tobacco Industry

Extract 1: The ills of smoking

Smoking causes disabling and fatal diseases, including cancers of the lung and other organs. Not all consumers have full knowledge of the health risks while others underestimate the risk of addiction to tobacco. In addition, smoking imposes financial as well as other costs on nonsmokers, including health damage and irritation from exposure to environmental tobacco smoke. Discarded cigarette ends not only add to the cost of cleaning public places but are fire hazards.

Extract 2: Tobacco farming in Europe

Tobacco products are products made entirely or partly of leaf tobacco. Tobacco is the most labour-intensive crop in Europe, requiring an average of 40 workers per hectare, as opposed to most other crops, which have just one worker per 100 hectares. In many ways tobacco farming is a throwback to an earlier era. Modern day farm equipment such as the combined harvester cannot be used.

Tobacco subsidies were once an important part of the European Union's agricultural policy. In the interest of public health, there will be a gradual phase-out of such subsidies.

Source: EU Observer, euobserver.com, 19 Nov 2008

**Table 1: Average World Tobacco Production Quantity Per Annum
(tonnes dry leaf equivalent)**

	1970-1979	1980-1989	1990-1999	2000-2006
World	5,256,991	6,387,084	7,429,717	6,419,411
Developed countries	1,556,782	1,412,750	1,313,559	865,391
Developing countries	3,700,209	4,974,334	6,116,158	5,554,020

Extract 3: The Great Tobacco Debate in Indonesia

In Indonesia, it is estimated that more than 62 percent of its citizens smoke, including children. Every year, the country spends more than Rp 100 trillion on tobacco-related health problems. To discourage smoking, the government has introduced a series of measures that include setting a limit on the production of cigarettes for sale in the domestic market and increasing taxes on cigarettes.

Opponents argue that the regulation on tobacco has to take into account the interests of tobacco farmers, cigarette companies, traders and workers. The country's cigarette companies employ about 600,000 people and the taxes they pay amounts to nine percent of the country's GNP. For the farmers, they worry about the loss of a source of income. Upon entering the dry season, for instance, after harvesting vegetables farmers will begin planting tobacco – the only crop that can offer profitable yields in the dry period.

Source: *The Jakarta Post*, www.thejakartapost.com, various, 2010

Figure 1: Export and Import value of Tobacco, Indonesia, 2000-2006 (US\$'000)



Source (Table 1 and Chart 1): *Prajogo U. Hadi, Reni Kustiari, Iwan S. Anugrah, Case Study of Tobacco Cultivation and Alternate Crops in Indonesia*, Jakarta: Indonesian Centre for Agricultural Socio-Economic and Policy Studies, 2008

Extract 4: The Economics of Tobacco in India

Tremendous economic growth has spurred a visible rise in disposable incomes. As international and domestic tobacco companies apply improved effective tobacco marketing strategies, the risk of an increase in tobacco consumption remains significant. Taxes on tobacco products are low. The result is that tobacco products have become increasingly affordable in India over the past decade.

Unlike the rest of the world where cigarettes is the preferred form of tobacco product, bidis are the overwhelming favourite among Indians. Research shows that a 10% rise in bidi prices would reduce bidi consumption by 9.2% and 8.5% in rural and urban India, respectively.

As opposed to raises taxes alone, experiences in countries like Australia have shown that improvements in health are greater when some of the tax revenues are dedicated to comprehensive tobacco control and other social and public health programmes.

Source: John RM, Rao RK, Rao MG, Moore J, Deshpande RS, Sengupta J, Selvaraj S, Chaloupka FJ, Jha P. The Economics of Tobacco and Tobacco Taxation in India. Paris: International Union Against Tuberculosis and Lung Disease; 2010.

Extract 5: Indian government passes new regulation

Tobacco firms must carry a graphic image of a mouth with cancer on all their packs in India. The country has very high sales of cigarettes purchased singly, which reduces the impact of pictorial warnings as many smokers never actually see them. Anti-smoking activists say sales of cigarettes are more affected by price rises and taxation than by pictorial health warnings.

In the past few years, India has come up with stringent rules to curb the use of tobacco. Tobacco-related advertisements are banned and the sale of tobacco products to young people is also an offence. A countrywide ban on smoking in public places came into effect two years ago - although correspondents say it is blatantly flouted and poorly enforced.

Source: BBC News, www.bbc.co.uk, 3 Dec 2010

Questions

- a. With reference to Table 1,
 - (i) compare the trends in tobacco production in developed and developing countries between 1970 and 2010. [2]
 - (ii) account for the differences observed. [4]
- b.
 - (i) With reference to Figure 1, summarise Indonesia's trade balance in tobacco between 2000 and 2006. [2]
 - (ii) Discuss whether you support the Indonesian government taking a tougher stand on smoking. [8]
- c. From Extract 4,
 - (i) deduce the price elasticity of demand for bidis among the rural and urban populations in India, [2]
 - (ii) explain, with the use of demand-supply diagram, whether consumers or producers will bear the greater burden of an excise tax on bidis. [4]
- d. As an economic consultant, what options would you present to the India government to better tackle the problem of smoking? Justify your answer. [8]

Question 2 The Global Economy: A Rebalancing Act

Indicators of the Chinese Economy

Figure 2:
Private consumption, investment and exports (% of GDP)

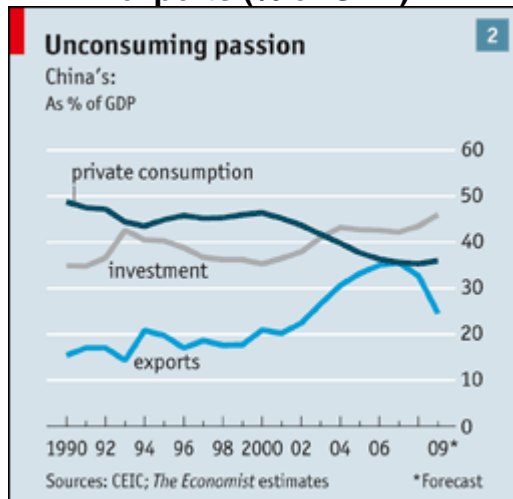
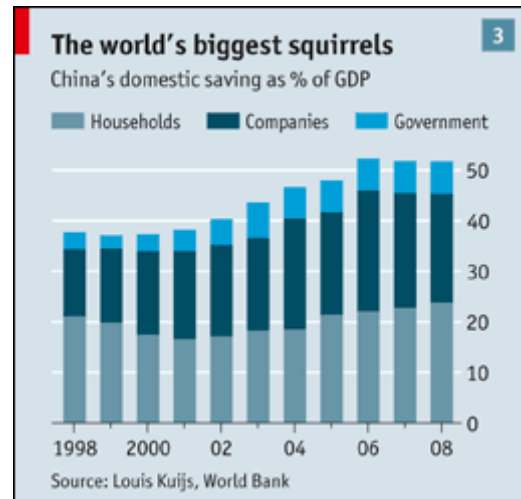


Figure 3:
Domestic Saving (% of GDP)



Source: The Economist, Jul 2009

Extract 6: China is Urged to Rebalance its Economy

The country's leaders are looking to rebalance the economy by shifting away from investment and export-driven growth towards an economy where domestic consumption plays a bigger part.

China began an economic expansion of unprecedented pace driven by investment and exports. But consumption growth, in particular, could not keep pace with the capacity created by rapid investment. As a result, much of the capacity was directed towards producing goods for the export sector and this has meant rising trade surpluses. The concern is that as the global economy enters into recession and competition from countries like Viet Nam intensifies, Chinese firms would find it much more difficult to sell their products abroad without deep price cuts. The continued expansion of capacity would then lead to price declines that reduce profits and undermine investor confidence.

To rebalance its growth, China needs to improve the provision of key social services, especially education, health care, and pensions. Reducing the uncertainties surrounding their provision will substantially diminish the strong precautionary saving motive and give households the confidence to raise their consumption.

The government also needs to implement a series of financial reforms. Its undeveloped financial system has made it hard for households and businesses to borrow. Firms have instead had to rely on internal savings for investment, and

consumers have done the same for almost all large purchases—education, health care, pensions, housing, and durable goods. Financial reforms to grant firms greater access to loans and more avenues to raise funds would reduce the incentives of them holding large savings. Better access to personal loans and private insurance would also diminish household saving and boost consumption.

Finally, China needs to allow its exchange rate to rise. This would lift consumers' real purchasing power, discourage excessive investment in manufacturing and help to reduce the trade surplus further. It would also alleviate the risk of a protectionist backlash abroad.

Source: The Economist, Jul 2009; Aziz J, Dunaway S. China's Rebalancing Act. IMF, 2007

Extract 7: The Great Financial Crisis

If China is a nation of savers, then America would be a nation of spenders. For decades, the United States' economic growth has been led by consumer spending. Its citizens went on a seemingly unstoppable spending binge, fuelling the global economy as they bought ever bigger houses and filled them with ever more stuff. Between 1980 and 2007, household saving rate fell while household indebtedness rose. As Americans spent more than they produced, the country's current-account balance went into a deficit. When the property prices collapsed and banks withheld lending, consumer expenditure declined, plunging the economy into its deepest recession in decades.

Source: The Economist, www.economist.com, 23 Jul 2009

Extract 8: A More Protectionist America

Despite economists' warnings, governments are turning their back on free trade and globalisation as the Global Financial Crisis deepens. The US policymakers have passed a bill with the "Buy American" clause, requiring government stimulus-funded projects to use only American-made equipment and goods even if they are more expensive.

The stimulus bill passed by the House last night contains a controversial provision that would mostly bar foreign steel and iron from the infrastructure projects laid out by the \$819 billion economic package. Proponents argue that it is the only way to ensure that the stimulus creates jobs at home and not overseas. Opponents, however, say it could spark retaliation from abroad against U.S. companies and exacerbate the global financial crisis.

Source: Washington Post, www.washingtonpost.com, 29 Jan 2009

Questions

- a. (i) Using Figure 2, compare the trends in China's investment and private consumption spending between 1990 and 2008. [2]
- (ii) Explain what other information you would need to help you assess the extent by which the living standards of the Chinese citizens have improved over two decades. [5]
- b. (i) Using Figure 3, summarise the trend in the government budget balance in China between 1998 and 2008. [2]
- (ii) Explain how this could change should the government accept the proposals outlined in Extract 6 to rebalance its economy. [2]
- (iii) Discuss the effects of any two of the policy proposals on the Chinese economy. [8]
- c. To what extent is a high rate of saving desirable? [6]
- d. Explain why economists cautioned against the rising tide of protectionism (Extract 8). [5]

Section B

Answer **one** question from this section

3. (a) Using the production possibilities curve and relevant examples, explain the concepts of scarcity, choice and opportunity cost. [10]
- (b) Discuss the view that, on balance, globalisation has benefitted Singapore. [15]
4. In the recent Global Financial Crisis, Singapore experienced a sharp recession and an increase in unemployment given its high dependence on external demand.
- (a) Explain the possible causes of high unemployment in Singapore. [10]
- (b) Discuss whether demand-management policies can best address the problem of high unemployment in Singapore. [15]



DUNMAN HIGH SCHOOL

Preliminary Examination 2011

Economics 8819

Answer and Mark Schemes

Sample Essays

Examiners' Report

Question 1

a. With reference to Table 1,

(i) compare the trends in tobacco production in developed and developing countries between 1970 and 2006 [2]

General:

- Tobacco production in developed countries was generally lower than in developing countries.

Difference

- Tobacco production in developed countries declined throughout the period, while tobacco production in developing countries rose from 1970 to 1999 before showing a decline from 2000 to 2006.

(ii) account for the differences observed. [4]

Any two reasons (state and explain)

- Labour intensive production (Extract 2) – possible shift of comparative advantage from developed to developing countries, where opportunity cost of tobacco production is lower.
- Gradual phase-out of tobacco subsidies in European Union's agricultural policy due to public health concerns, lowering tobacco production due to higher unit cost of production. On the other hand, regulation may be weaker in developing countries since tobacco production accounts for a substantial part of their national output (Extract 3).
- Increased tobacco production to meet significant rise in tobacco consumption in developing countries as compared to developed countries, due to tremendous economic growth and increase in disposable income.
- Reduction of tobacco production in developing countries from 2000 to 2006 possible due to series of measures taken by governments (eg, limit in production in Indonesia)

b. (i) With reference to Figure 1, summarise Indonesia's trade balance in tobacco between 2000 and 2006. [2]

- Indonesia's tobacco import value is consistently higher than export value between 2000 and 2006. Therefore, Indonesia experienced a trade balance deficit throughout the period.
- From 2005-06, Indonesia's tobacco import value rose while export value fell. Therefore, Indonesia experienced an increasing trade balance deficit during this period.

(ii) **Discuss whether you support the Indonesian government taking a tougher stand on smoking.** [8]

Tougher stand on smoking should be supported because it is estimated that more than 62 percent of Indonesian smoke, including children. Cigarettes are considered demerit goods because consumers only consider their private costs when consuming cigarettes. The government believes that the cigarettes are over-consumed when left to the free market because individuals are unable to factor in the full private cost of consumption (Extract 1 states not all consumers have full knowledge of the health risks while others underestimate the risk of addiction to tobacco). In addition, the government believes that the consumption of cigarettes will have substantial external costs to the society (Extract 3 states that Indonesia spends more than Rp 100 trillion on tobacco-related health problems every year).

The government can raise its revenue from increased taxes on cigarettes.

Tougher stand on smoking should not be supported because the Indonesian economy relies significantly on tobacco production. Regulation may lower the real output of the economy and lead to increased unemployment (Extract 3 states that the country's cigarette companies employ about 600,000 people and the taxes they pay amounts to nine percent of the country's GNP). Regulation on tobacco may affect the interests of tobacco farmers, cigarette companies, traders and workers.

The limit on the production of cigarettes for sale in the domestic market may cause Indonesia's tobacco import value to rise even faster. Holding tobacco export value constant, Indonesia's trade balance on tobacco would worsen.

Evaluation

- Support tougher stand on smoking.
- Indonesia needs to move away from dependence on tobacco production for economic growth in the long run (eg, develop comparative advantage in other economic sectors, like manufacturing).
- Tougher stand can be enhanced if additional tax revenue collected is used on raising public awareness on the negative impact of smoking.

Knowledge, Application, Understanding and Analysis	
L3 7-8	For an answer which <ul style="list-style-type: none"> • has sufficient scope and depth of economic analysis • provides evidence of exemplification • contains minor conceptual errors
L2 4-6	For an answer which <ul style="list-style-type: none"> • explains both the thesis and antithesis using some economic analysis though not consistently applied • provides some evidence of exemplification • is largely theoretical and contains some conceptual errors

	OR Cap at 5m <ul style="list-style-type: none"> • applies sound economic analysis but lacks scope, i.e. explains only thesis or antithesis
L1 1-3	For an answer which <ul style="list-style-type: none"> • is largely irrelevant with no indication that the meaning of the question has been properly grasped • is largely descriptive or lacking in the use of economic analysis • contains major conceptual errors

c. From Extract 4,

- (i) deduce the price elasticity of demand for bidis among the rural and urban populations in India. [2]**

The demand for bidis among the urban population is more price inelastic than the urban population in India. This is because a rise in the price of bidis leads to smaller reduction in consumption among the urban population as compared to the rural population (difference in responsiveness to price changes).

- [max 1m] Both the rural and urban populations likely have a price inelastic demand for bidis, since a rise in bidis price leads to a less than proportionate decrease in bidis consumption.

- (ii) explain, with the use of demand-supply diagram, whether consumers or producers will bear the greater burden of an excise tax on bidis. [4]**

Holding demand constant, an excise tax will shift the supply curve for bidis up, from S_0 to S_1 as shown in Diagram 1, assuming a specific tax. The equilibrium price rises from P_0 to P_1 , while the equilibrium quantity demanded falls from Q_0 to Q_1 . At Q_1 , P_2 depicts the price of bidis before tax, while the vertical distance bc depicts the excise tax amount. The more price-inelastic the demand for bidis, the more tax burden will be borne by the consumers. The demand for bidis is likely to be price inelastic, since a rise in bidis price leads to a less than proportionate decrease in bidis consumption in both urban and rural populations as mentioned in Extract 4. The tax burden borne by consumers is greater, as shown by the area P_0P_1bd , while the tax burden borne by the producers is smaller, as shown by the area P_2P_0dc .

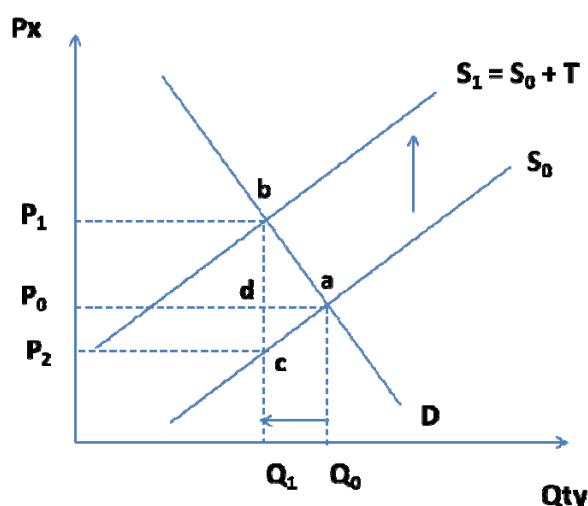


Diagram 1: Market for Bidis
(Effect of Excise Tax)

- d. As an economic consultant, what options would you present to the India government to better tackle the problem of smoking? Justify your answer. [8]

Possible options include:

- Stronger enforcement
 - Ban tobacco advertisements, sale of tobacco to young people and smoking in public places; enforce graphic images on cigarette packaging and sale of cigarettes in packs rather than singly to ensure smokers see the pictorial warnings.
 - Evaluation: This can be an immediate measure to curb smoking in India. However, with a large population and wide range of smoking avenues, stronger enforcement can be very costly for the government and monitoring issues may arise ('blatantly flouted and poorly enforced'). This causes a strain on government resources and possible government failure may arise due to imperfect information.
- Raise tobacco price and tax
 - Anti-smoking activists say sales of cigarettes are more affected by price rises and taxation than by pictorial health warnings.
 - Impose similar restrictions on bidis, a close substitute for cigarettes (satisfy the same need for smoking) and an overwhelming favourite among Indians.
 - Economic growth and rise in Y, together with fairly constant expenditure on bidis (assuming prices have not changed much) → proportion of income spent on bidis has fallen → PED increases
 - By raising tobacco prices and tax, the proportion of income spent on bidis will increase, causing a greater fall in its quantity demanded
 - Evaluation: This measure can have an immediate effect to curb smoking. However, it may work better among the lower-income rural population (more price-elastic demand for bidis) than the urban population (less price elastic demand for bidis due to rising disposable income).
 - Alternative: One way to overcome this issue is to charge higher tobacco prices taxes for higher income groups to increase their price elasticity of demand for bidis. The additional revenue collected can be used for tobacco enforcement and public health programmes. However, monitoring issues may arise (eg, consumers may not report their income level truthfully, additional revenue may not be channelled to proper use).

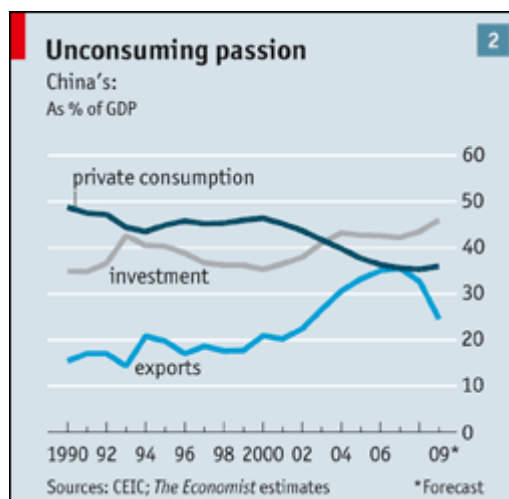
- Emulating Australia's example
 - India can dedicate part of tax revenues to comprehensive tobacco control and other social and public health programmes. By raising consumer awareness, fewer consumers will smoke (change taste and preference away from smoking), causing the demand for bidis to fall.
 - Evaluation: The success of public health programmes depends largely on the public's attitude and acceptance towards such programmes. While time is needed to change public perception, the success of this measure will have a long term effect on curbing smoking in India. The allocation of revenue collected to tobacco control and public health programmes, among other needs for economic development, may be a challenge for the Indian government.
- Overall judgement
 - The ability to channel revenue collected to tobacco control and public health programme is critical to successfully curb smoking in India.
 - While stronger enforcement is necessary, the onus is on the government to keep up its efforts. It may be more effective to raise public awareness to better internalise the external costs of smoking for individuals.
 - To curb the widespread problem of smoking, India may consider implementing multiple measures. Immediate measures must be complemented by longer-term measures as a more sustainable strategy to successfully curb smoking in the country.

Knowledge, Application, Understanding and Analysis	
L3 7-8	For an answer which <ul style="list-style-type: none"> • has sufficient scope and depth of economic analysis • provides evidence of exemplification • contains minor conceptual errors
L2 4-6	For an answer which <ul style="list-style-type: none"> • explains possible options using some economic analysis though not consistently applied • provides some evidence of exemplification • is largely theoretical and contains some conceptual errors OR Cap at 5m <ul style="list-style-type: none"> • applies sound economic analysis but lacks scope, i.e. explains only one possible option
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Question 2

- a. (i) Using Figure 2, compare the trends in China's investment and private consumption spending between 1990 and 2008. [2]

Figure 2:
Private consumption, investment and exports (% of GDP)



The following approaches are acceptable:

- 1) comparison of C & I in absolute terms
- 2) comparison of C & I as a % of GDP

For comparison of C & I in absolute terms

Note: Data gives spending as a % of GDP but we know from contextual knowledge that GDP in China has been rising rapidly, it is likely that the increase in GDP more than offsets the fall in C as a % of GDP

2m → 1 similarity + 1 difference

- Similarity: *Investment and private consumption spending both increased* [1]
- Difference: *Investment spending increased more* [1]

For comparison of C & I in % terms

2m → 2 differences

- Private spending as a % of GDP fell while investment spending as a % of GDP increased. [1]
- As a % of GDP, investment spending was below private consumption at the start of the period but had overtaken the latter from 2003. [1]

- (ii) **Explain what other information you would need to help you assess the extent by which the living standards of the Chinese citizens have improved over two decades.** [5]

Data only gives consumption as a % of GDP. To find the exact effect on the material SOL, one needs data on GDP so as to work out how consumption has changed over time.

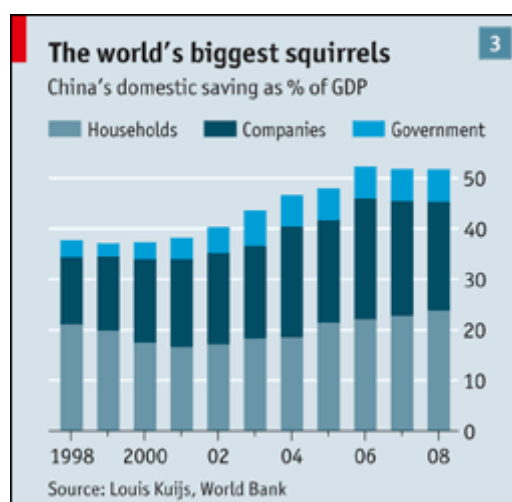
In addition, consumption on its own says nothing much about SOL without data on how the g&s available for consumption is shared out among individuals. To do that, one needs data on population growth and income distribution.

[2m] identification of 2 other pieces of data required

[3m] explanation of how the data can help to assess the extent of SOL improvement

- b. (i) **Using Figure 3, summarise the trend in the government budget balance in China between 1998 and 2008.** [2]

**Figure 3:
Domestic Saving (% of GDP)**



Increasing [1] surplus [1]

Concept: Government saving arises from a budget surplus. The growth of the public sector saving rate, together with its GDP growth (contextual knowledge), means that public saving has been increasing in absolute terms, suggesting an increase in budget surplus.

(ii) Explain how this could change should the government accept the proposals outlined in Extract 6 to rebalance its economy. [2]

Amongst the proposals outlined include “to rebalance its growth, China needs to improve the provision of key social services, especially education, health care, and pensions.”

increase in government outlay [1], ceteris paribus → reduction of budget surplus [1]

(iii) Discuss the effects of any two of the policy proposals on the Chinese economy. [8]

Policy	Effects
<i>Improve the provision of key social services, especially education, health care, and pensions.</i>	<ol style="list-style-type: none"> 1. Provision of merit goods → improve economic efficiency, raise non-material SOL 2. Improve factor quality, promote potential growth 3. Increase C_d, promote actual growth, reduce UN 4. Cause inflation and a worsening of C/A balance
<i>Financial reforms to grant firms greater access to loans and more avenues to raise funds give hhs access to personal loans and private insurance</i>	<ol style="list-style-type: none"> 1. Increase I & C_d, promote actual growth, reduce UN 2. Cause inflation and a worsening of C/A balance 3. Investment adds to the economy's stock of capital, promote potential growth
<i>Allow the yuan exchange rate to rise.</i>	<ol style="list-style-type: none"> 1. decrease both dd-pull and cost-push inflation 2. reduce trade surplus (ML condition), alleviate risk of protectionist backlash 3. decrease AD and smaller increase in AS → c.p., real NY and employment to decrease

Policy #1: Improve the provision of key social services, especially education, health care, and pensions. Reducing the uncertainties surrounding their provision will substantially diminish the strong precautionary saving motive and give households the confidence to raise their consumption.

Effects (explain any two effects):

1. Microeconomic effect: improve economic efficiency

Education and health care are merit goods with positive externality.

- Individuals have imperfect information. They undervalue the private benefits of education and health care (especially preventive health care such as health screening). Also, it is not possible for individuals to know exactly when they may be hit by some catastrophic illness which require expensive treatment. As such, they do not have sufficient savings to meet such a need.
- The low income households might not be able to afford expensive medical treatment / procedures especially on chronic diseases which require long-term care e.g. dialysis.
- The benefits from the consumption of education and health care extend beyond the consumers of the services themselves, i.e. generate positive externality. For example, education raises the productivity of the workforce, attracts investment and generates high growth from which the government is able to obtain higher tax revenue and provide more social services. A person consuming vaccination confers benefits to the people around him by reducing their risk of being infected.

Left to the price mechanism, such services will be under-produced. Increased provision by the Chinese government helps to close the gap between Q_s and Q_p , promoting a more efficient allocation of resources.
<graph>

Assessment of impact:

Imperfect information on the part of the government might lead to them overestimating the social benefits and hence increase Q' beyond Q_s , could potentially be a case of government failure when government intervention deepens the inefficiency.

2. Macroeconomic effect:

a. On domestic economic goals

LR growth

Increase provision of education and health care may be seen as fiscal policy with supply-side effects. With better educated and health, labour

productivity would increase. Assuming ceteris paribus, this leads to potential growth → increase in future SOL

SR stability

By providing these social services, the government is effectively strengthening the social safety net, reducing the need for individuals to save → increase spending, increase C_d → increase AD → increase NY and employment <graph + accompanying explanation>

<explain the adjustment and multiplier processes> Holding output constant, firms experience unplanned disinvestment as they draw down their inventories to meet the unanticipated increase in demand → increase output in the next production cycle to restore their stocks to the optimal level → demand for fops as derived dd increase → increase employment. As more factor income is paid out, C_d increases, fuelling successive rounds of increase in AD and NY

Evaluation:

The magnitude of the final increase in NY and employment depends on:

(i) the availability of spare capacity

With many regions in China approaching full employment / facing structural rigidities, an increase in AD will bring about little expansion in real output and employment. Instead, we are more likely to observe sharp inflation. <explain the economic intuition, relate to graph> Increase in dd for fops → competition for resources, pushing factor prices sharply upwards and, with it, the price of final goods and services

(ii) k size

k size in China likely to be large (why?)(implication?)

b. On external economic goals

By providing these social services, the government is effectively strengthening the social safety net, reducing the need for individuals to save → increase spending on g&s including M → c.p., worsens C/A balance

Policy #3: Allow the yuan-dollar exchange rate to rise

Effects (explain any two effects):

1. Appreciation of yuan → increase prices of Chinese export in foreign currency terms, decrease prices of imports in terms of yuan → discourage X, encourage M
 - a. Assuming ML condition holds, i.e. $PED_X + PED_M > 1$, the above price changes will induce large enough fall in $Q_d X$ and rise in $Q_d M$ so that TR_X falls relative to TE_M causing a worsening of the current account balance

- b. Simultaneously, this will cause AD to decline → unplanned investment at the current output, firms respond by cutting back production and laying off workers, reducing factor income payment. This decrease in income induces yet more contraction in Cd and consequently AD → multiple contraction in NY and employment. Furthermore, with dd for factor inputs falling, factor prices fall. In all, the policy of an ER appreciation helps to moderate the pace of increase in AD, reducing the risk of the Chinese economy suffering from demand-pull inflation. <graph>
2. The reduction in import prices in terms of yuan also reduces firms' unit COP, particularly those firms that rely considerably on imported raw materials and intermediate goods → reduction in unit cost increases firms' profit margin, inducing them to expand production and hire more workers (increase in AS), increase in real NY, fall in employment. At the same time, pass on part of this cost savings to crs when firms reduce prices of final g&s → reduce cost-push inflation <graph>
3. May also combine the graphs to show AD falling and AS increasing because of the appreciation, commenting on the overall impact on inflation, employment, income.

Evaluation: Negative effects unlikely to be severe for China.

- It imports much of the intermediate goods needed to produce the final good for export. With an appreciation of yuan, imports become cheaper in yuan terms, reducing the unit cop, partially offsetting the loss of export competitiveness brought about by the strengthening of its currency in the first place. Hence, while its C/A balance may worsen, the impact is not likely to be great.
- Besides, by making the export price higher, the yuan appreciation may actually force Chinese firms to innovate to raise the quality of their goods and/or to develop more cost efficient methods of production in order to remain competitive vis-à-vis their overseas competitors. Thus, while the firms were able to simply enjoy strong growth in sales from an undervalued yuan, the appreciation of the yuan provides the impetus for them to innovate. With improvement in technology, the productive capacity of the economy expands, shifting the AS curve outwards, increasing the potential growth of the economy.

Synthesis:

- Policy 1: provision of social services to reduce S, increase C → increase AD
- Policy 2: appreciation of yuan → decrease AD

Overall, policies work together to rebalance growth, i.e. reduce the share of X and increase the share of C in the economy's AD → achieve growth rebalancing while minimising any possible contractionary effect on the economy

L3: 6-7	Scope / Depth of answer: <ul style="list-style-type: none"> • use of economic framework to analyse both policies • balanced arguments
L2: 4-5	Answer is lacking in some aspect: <ul style="list-style-type: none"> • some use of economic framework though not consistently applied • limited in scope / balance
L1: 1-3	Answer largely descriptive
E: 1	Evaluative judgement: <ul style="list-style-type: none"> • comment on extent / overall desirability of effects

c. To what extent is a high rate of saving desirable?

[6]

(Context)

1. Effect on external goals

High rate of S → less consumption (both domestically produced and imported goods) with given income → slower rate of growth of import expenditure as the economy expands relative to the growth in external demand → enjoy C/A surpluses

Benefits of accumulation of reserves: allow the country to (1) finance future deficits, avoiding external debt, (2) maintain ER stability

e.g. Extract 6 tells of how China's high saving rate is the cause of its trade surplus while Extract 7 of the fall in US household saving as the cause of its current account deficit

2. Effect on stability

a. High rate of S (less consumption) → greater reliance on external demand to fuel growth → increase vulnerability to external dd-side shocks

e.g. Extract 6 tells of the challenges that China faces given its reliance on exports. When trading partners face recession or when low cost competitors emerges → fall in exports, fall in AD → cp, unplanned investment → firms respond by partly cutting back production in the next cycle and partly cutting prices → reducing demand for fops at the same time, decrease employment and NY, reinforced by k + possible deflationary effect → decrease expected ROR_i → undermine investors' confidence → reduce I, reduce K accumulation → reduce potential growth and the ability of economy to produce g&s to satisfy wants to raise SOL

- b. High rate of S (less consumption) → reduce household debts → greater financial hence economic stability

e.g. Extract 7 tells of how the households in US cut back on saving and take on more loans to finance their spending after 1980 eventually culminated in the Global Financial Crisis (economic analysis...)

(Theoretical)

3. SR effects

High rate of S, cp → moderate growth in AD in line with the expansion with the economy's productive capacity

- demerits: (1) slows down actual growth rate and hence the pace of employment creation, (2) high rate of S at the expense of C → slower increase in material SOL
- merits: for an economy that is close to full employment / facing structural rigidities, this reduces the intensity of competition for fops → reduce risk of dd-pull inflation

<explain the economic intuition + graph>

4. LR effects

High rate of S, cp → increase ss of loanable funds, decrease i/r → reduce cost of borrowing relative to the expected rate of returns on I → increase I → increase in economy's capital stock → expansion in productive capacity → potential growth, increase SOL in the LR

Evaluation

- SR v.s. LR – SR may not be beneficial as it means a suppression of C and hence SOL but benefits in the LR through sustained growth

L2: 3-5	Scope / depth <ul style="list-style-type: none"> • both positive and negative effects • use of analytical framework • cap at 4 if answer is purely theoretical
L1: 1-2	Answer largely descriptive
E: 1	Evaluative judgement: <ul style="list-style-type: none"> • comment on extent / overall desirability of high saving

d. Explain why economists cautioned against the rising tide of protectionism (Extract 8). [5]

“Buy American” clause, requiring government stimulus-funded projects to use only American-made equipment and goods even if they are more expensive

- Raises cost of government projects
EITHER (1) increase in budget deficit and debt, reducing SOL of future generation as taxes have to be raised or when government cuts back provision of social services and infrastructure to service its debt (may also relate to crowding-out effect)
OR (2) opportunity cost in terms of other areas of spending forgone e.g. healthcare and education

Opponents, however, say it could spark retaliation from abroad against U.S. companies and exacerbate the global financial crisis.

- “Buy American” → increase G_d but retaliation from other countries → decrease X → overall effect: does little to correct the C/A deficit or stimulate AD to create actual growth and jobs
- Protectionism as a beggar-thy-neighbour policy or due to retaliation → reverse multiplier operating on a global scale → contraction in global GDP and rising unemployment
e.g. (beggar-thy-neighbour) Protectionism in US → fall in X of trading partners who then experience a fall in their AD and NY → reduce their ability to buy g&s including X from US → further contraction in AD and NY of US → more rounds of reduction in M_{dd} and Y transmitted between US and the rest of the world

2 sets of reason & reasoning: 3 + 2

Cap at 3m if answer purely theoretical

Question 3

- (a) Using the production possibilities curve and relevant examples, explain the concepts of scarcity, choice and opportunity cost. [10]
- (b) Discuss the view that, on balance, globalisation has benefitted Singapore. [15]

Part (a)

Production Possibility Curve (PPC)

- shows the maximum amount of two goods and services that can be produced by an economy at a given point in time (eg, consumer goods and capital goods as shown in Fig 1), assuming:
 - resources are fully employed
 - production takes place over a specific period of time
 - quantity and quality of resources to produce the goods are fixed over the given period
 - technology remains constant during the given period

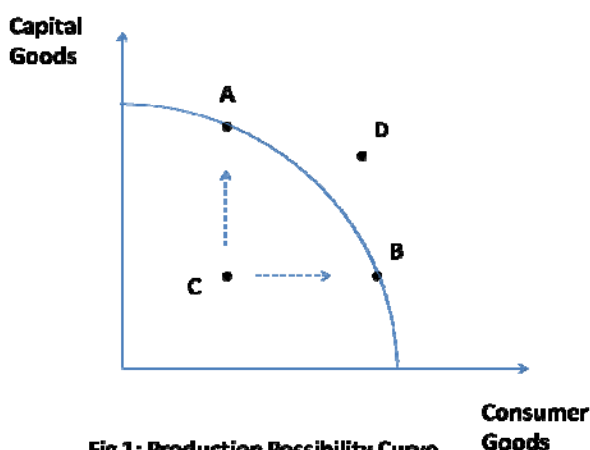


Fig 1: Production Possibility Curve

Scarcity as illustrated on the PPC

- ability to produce only combinations of goods within or on the PPC (Points A, B or C)
- the economy achieves **productive efficiency** if it produces on the PPC (Points A and B) → producing at the maximum output with its given resources.
- the economy's resources are under-utilised if it produces within the PPC (Point C) → it is possible to increase the production of capital goods with reducing the production of consumer goods.
 - for every point within the PPC, there will always be another point which yields higher level of economic welfare → able to produce more of one good without sacrificing the other
 - by minimising the average cost of producing goods and services, the economy can maximize its output from given stock of resources → satisfy more wants
- points beyond PPC are unattainable due to limited resources (Point D) → PPC indicates the maximum quantities of the two goods that can be produced by the economy

Choice as illustrated on the PPC

- choosing to produce at two different points on the PPC (Points A or B), depending on the economy's preference for between capital and consumer goods.
- economy will produce at Point A if it prefers more capital goods; will produce at Point B if it prefers more consumer goods
 - the economy achieves **allocative efficiency** when it produces the right mix of goods and services so as to maximise economic welfare

Opportunity Cost as illustrated on PPC

- trade-off between the two goods
- PPC is concave due to increasing opportunity cost because resources are not perfectly adaptable for alternative uses → when the economy channels more resources to produce any specific good, the opportunity cost increases for each additional unit produced

Knowledge, Application, Understanding and Analysis	
L3 8-10	For an answer which <ul style="list-style-type: none">• has sufficient scope and depth of economic analysis• provides evidence of exemplification• contains minor conceptual errors
L2 5-7	For an answer which <ul style="list-style-type: none">• explains the required concepts using some economic analysis though not consistently applied• provides some evidence of exemplification• is largely theoretical and contains some conceptual errors OR <ul style="list-style-type: none">• applies sound economic analysis but lacks scope, i.e. explained only one or two of the required concepts (cap at 5m and 7m respectively)
L1 1-4	For an answer which <ul style="list-style-type: none">• is largely irrelevant with no indication that the meaning of the question has been properly grasped• is largely descriptive or lacking in the use of economic analysis• contains major conceptual errors

Part (b)

Globalisation

- the process of increasing free flow of goods and services, capital, investment, labour and ideas

Benefits of Globalisation for Singapore

- small and open economy → dependent on trade for growth → increase in demand for exports leads to a rise in AD, stimulates greater output (actual growth) and employment
- domestic firms can reap IEOS with a greater global market to serve, efficiency may also improve under greater global competition.
- lack natural resources (factor endowment) → import from countries with abundance resources (availability and lower cost of production, SRAS shifts out)
- import resources for consumption → able to consume beyond the range of goods that can be produced using domestic resources (consume beyond production possibilities to maximize social welfare)

- dependent on inflow of talent, FDI and financial capital, skills and technology → able to develop knowledge intensive industries (potential comparative advantage → potential growth)
- benefit from outflow of domestic investments and outsourcing to lower cost of production

Negative Impact of Globalisation for Singapore

- high dependence on global market → extremely vulnerable to changes in global economic conditions (eg, effects of global financial crisis transmitted quickly to Singapore via large fall in export demand → drastic fall in AD, reducing domestic output and raises cyclical unemployment)
- also experience capital volatility due to poor investor confidence (fall in expected net rate of return to investments)
- speeds up structural change in economy → eg, Singapore can quickly lose comparative advantage to developing countries (shift of low-cost manufacturing through transfer of technology and information) → occupational immobility of local workers can lead to rise in structural unemployment
- also increase in income disparity between skilled and unskilled workers

Possible Evaluation Points on whether Globalisation has benefitted Singapore

- depends on Singapore's ability to retain benefits of globalization, eg, retention of profits from tangible FDI vs outflow of profits (worsening of current account in BOP)
- depends on Singapore's ability to restructure its economy to offset the loss of comparative advantage in lower-end industries, eg, retraining workers to reduce occupation immobility and leveling of income disparity, investment in technological advancements to develop knowledge-intensive industries with lesser competition

Knowledge, Application, Understanding and Analysis	
L3 9-11	For an answer which <ul style="list-style-type: none"> • analyses both thesis and antithesis arguments • displays depth of economic analysis for most part of the essay • makes effective use of diagrams • applies accurately to the given context • may contain minor conceptual errors
L2 6-8	For an answer which <ul style="list-style-type: none"> • provides sufficient scope, i.e. thesis and antithesis arguments • contains some economic analysis though not consistently applied • is largely theoretical with limited application to the given context • contains some conceptual errors OR Cap at 6m <ul style="list-style-type: none"> • applies economic analysis but lacks balance
L1 1-5	For an answer which <ul style="list-style-type: none"> • is largely irrelevant with no indication that the meaning of the question has been properly grasped • is largely descriptive or lacking in the use of economic analysis • contains major conceptual errors
E2 3 – 4	For a reasoned judgement
E1 1 – 2	For an unexplained judgement

Question 4

In the recent Global Financial Crisis, Singapore faced the sharpest recession and highest unemployment among major Asia-Pacific economies, given its high dependence on external demand.

- (a) Explain the possible causes of high unemployment in Singapore. [10]
 (b) Discuss whether demand-management policies can best address the issue of high unemployment in Singapore. [15]

Part (a)

A high rate of unemployment can be caused by:

- Cyclical (demand-deficit) unemployment
 - Falling national incomes due to GFC → significant fall in purchasing power → sharp fall in Singapore's export demand, assuming high YED for Singapore's exports
 - Large share of X in AD → fall in X leads to decrease in AD → firms face large unplanned investments, thus reducing output and demand for factors of production (including labour). Fall in NY and employment reinforced by multiplier process, leading to increase in cyclical unemployment.
- Structural unemployment
 - Structural change in economy (eg, loss of export demand coupled with loss of comparative advantage causing sharp decline in manufacturing sector, strong growth in services sector due to opening of IRs) → laid-off workers unable to find alternative employment (eg, due to factor immobility) → high structural unemployment
- Real-wage unemployment
 - Wages may be held above market clearing level and unable to adjust quickly (eg, contractual agreement) → use DD/SS analysis to show surplus labour → high real-wage unemployment

Knowledge, Application, Understanding and Analysis	
L3 8-10	For an answer which <ul style="list-style-type: none"> • has sufficient scope and depth of economic analysis • applies accurately to the given context, explaining causes of high unemployment • provides evidence of exemplification • contains minor conceptual errors
L2 5-7	For an answer which <ul style="list-style-type: none"> • provides at least two possible causes of high unemployment • contains some economic analysis though not consistently applied • is largely theoretical with limited application to the given context • contains some conceptual errors OR Cap at 5m <ul style="list-style-type: none"> • applies sound economic analysis but lacks scope, i.e. explained only one possible cause of high unemployment OR Cap at 7m <ul style="list-style-type: none"> • applies sound economic analysis with scope but without consideration of high unemployment

L1 1-4	For an answer which <ul style="list-style-type: none"> • is largely irrelevant with no indication that the meaning of the question has been properly grasped • is largely descriptive or lacking in the use of economic analysis • contains major conceptual errors
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Part (b)

- 'Best address' – discuss (i) speed and (ii) extent of resolving high unemployment
- Explain how demand management policies can solve demand-deficient unemployment (include limitations and inability to solve structural unemployment)
- The need for supply-side policies to resolve structural unemployment (include limitations of supply-side measures)
- Provide judgment on the use of demand management policies to solve unemployment in general.
- Use AD/AS diagrams to reflect the impacts of the relevant policies in addressing unemployment
 - Jobs Credit Scheme as a form of expansionary fiscal policy - directly subsidise the cost of production for firms and retain employment.
 - Limitations - firms may still have to lay off workers (i) if they cannot stay afloat despite the reduction in the costs of production (ii) if they face persistent declining demand
 - SPUR (Skills Programme for Upgrading and Resilience) – training opportunities for workers who are unemployed in view of skills mismatch with the employment opportunities available. The training serves to reduce domestic structural unemployment in the long run.
 - Limitations – Need to convince employers and workers to invest time and effort for a long term benefit when they are facing short term constraints.
 - Increase in government expenditure as a form of expansionary fiscal policies (eg, bring forward infrastructural projects, increase provisions in education and healthcare, expand employment in public sector). There are supply side effects from the expansionary fiscal policies since the expenses are on education and healthcare. This has long term effect of improving the AS curve to the right.
 - Limitations – small multiplier – high leakages may dilute the effectiveness of an increase in G (eg, high import spending in Singapore; increased savings due to poor economic outlook)

Evaluation:

- Nature and magnitude of unemployment – combination of policies required to better address high unemployment
- Characteristics of Singapore economy – small and open – limited effectiveness of government policies in dealing with external economic downturn
- Time lags: increase in government spending might take some time to work through the economy. If the time lag is too long, the fiscal policy may prove to be destabilizing, because the economy could have recovered by then. The fiscal policy could thus lead to the problem of overheating the economy.

Knowledge, Application, Understanding and Analysis	
L3 9-11	For an answer which <ul style="list-style-type: none"> discusses demand management and alternative policies displays depth of economic analysis for most part of the essay makes effective use of diagrams applies accurately to the given context may contain minor conceptual errors
L2 6-8	For an answer which <ul style="list-style-type: none"> provides sufficient scope, i.e. demand management policies and alternatives contains some economic analysis though not consistently applied is largely theoretical with limited application to the given context contains some conceptual errors OR Cap at 8m <ul style="list-style-type: none"> provides synthesis of various policy options without addressing the issue of high unemployment OR Cap at 6m <ul style="list-style-type: none"> applies economic analysis but lacks balance
L1 1-5	For an answer which <ul style="list-style-type: none"> is largely irrelevant with no indication that the meaning of the question has been properly grasped is largely descriptive or lacking in the use of economic analysis contains major conceptual errors
E2 3 – 4	For a reasoned judgement
E1 1 – 2	For an unexplained judgement