Answers to 2015 H2 Economics Preliminary Exam Paper 1

CSQ1

<table>
<tr><td>(a)</td><td>Explain what could be inferred from Figure 1 about the change in the Singapore government’s reserves from 1999 to 2013.

Rising [1]

Reason: It ran budget surpluses in more years than it ran deficits and the surpluses tended to exceed the deficits during this period. [1]</td><td>[2]</td></tr>
<tr><td>(b)</td><td>Using Table 1, compare health expenditure as a percentage of GDP by the US and UK governments. Justify your answer.

In terms of govt health spending <u>as % of GDP</u>, US government spent more than UK. [1m for comparison]

Although the US government’s share out of total health spending is much smaller, the total spending in US as % of GDP on health care is much higher. [1m for justification]

Calculation for US: 0.471 x 17.1 % of GDP = 8.037% of GDP

Calculation for UK: 0.835 x 9.1% of GDP = 7.5985% of GDP

Note: The calculation is not necessary.</td><td>[2]</td></tr>
<tr><td>(c)</td><td>“The average CT scan is five-times more expensive (in US) than in Canada.” (Extract 2)

Justify if this difference in price is due to price discrimination.

3rd degree price discrimination (PD) is the charging of different prices to different consumers for the same product for reasons not due to differences in marginal costs.

No

- PD applies to the same service produced by the same producer. Based on the data, the service is likely to be different such that the higher price in US could be due to a higher quality service, given extract 2’s reference to US clinics offering health care that involves new technologies. Moreover, it is likely to be produced by different producers.

- Average GDP per head in the two countries is rather comparable, given that both are developed countries. This implies that the price elasticity of demand is rather similar. So the prices shouldn’t be that different (5-fold difference) even if 3rd degree PD is taking place.

- The price difference is likely due to different health care systems. In US, demand is driven up by ‘for-profit insurance’ (Extract 2) because the insurance enhances patients’ ability to pay. Higher demand results in higher level of scarcity giving rise to high prices. In contrast, in Canada, the national health insurance model help to control costs by limiting the medical services that the national health insurance plan will cover. This could have moderated the demand for CT scans, resulting in lower price.
L1: 1-2: Explains the conditions of PD but no consideration of context.

L2: 3-5: Explanation that the phenomenon is not PD is supported by theory of PD
And consideration of the context.
[2 application points that show understanding of the conditions of PD, with analytical explanation]</td><td>[5]</td></tr>
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<table>
<tr><td>(d)</td><td>Using the concept of opportunity cost, explain how rising health care expenditure caused by an ageing population will impact a country’s economic growth.

Given scarcity of resources, with increased spending on health care, a consumption good, the opportunity cost would be less spending in capital goods. [1]

With less spending on capital goods, the country’s capital stock will grow more slowly [1], causing the country’s productive capacity to grow more slowly, thus reducing GDP growth. [1]</td><td>[3]</td></tr>
<tr><td>(e)</td><td>With reference to the data, discuss whether the single payer national health service model is superior to the market driven model of health care system.

<u>Explain the systems</u>
In the market driven model (e.g. US, developing countries with no government-established health care systems), price is determined by market forces. Health care demand is supported by ‘for-profit’ health insurance for those who can afford such insurance.

In the single payer national health service model (e.g. UK), the government provides free health care, treating it like as though it is a public good (police) or semi-public good (library) when it is not. Health service providers are mainly govt-owned.

<u>Comparison</u>
Pros of single payer national health service system
1. It ensures that everyone, including the poor has access to this necessity good.

In contrast, in developing countries and in the US, those with no/inadequate purchasing power go without health care (Extract 1, para 3). This is because in such a system, profit-motivated firms sell only to those who are willing and able to pay.

As such, there is higher standard of living compared to countries that use the market driven model. This is seen in higher life expectancy and lower infant mortality in UK compared to US (Refer to table 1)

2. It has resulted in lower spending on health (refer to table 1), since the government controls price and quantity of services offered by doctors (refer to extract 1).

In contrast, in US, demand is driven up by ‘for profit insurance’ because the insurance enhances patients’ ability to pay which could result in over-consumption and high prices (Extract 2). (Note: Could also apply ‘moral hazard’ and ‘asymmetric information’ concepts to explain the problem of over-consumption.)

Better outcome (higher life expectancy and lower infant mortality) with lower overall spending on health means that the single-payer system is more cost efficient.

3. It corrects market failure

In the market driven model, the market equilibrium quantity is not socially optimal. Consumers disregard positive externalities of health care (e.g. better health means less loss of man hours for employers and less covering of work by colleagues) and they may not be fully aware of the benefits of consuming health care. As such, they undervalue health services. The resulting low</td><td>[8]</td></tr>
</table>

demand causes market equilibrium to be lower than the socially optimal level.

The single payer health model is an attempt to correct this market failure and could lead to smaller welfare loss for society.

Cons of single payer national health service system

1. Free provision results in allocative inefficiency because free provision results in **over-consumption** (Could also apply 'moral hazard' concept). That is, consumption reaches the point where MSB<MSC, resulting in **welfare loss**. (i.e. Government Failure).

   Unlike public goods and semi-public goods, health care is rival in consumption. This mean that the service should not be provided free since MC of providing for the additional user is not zero given that it is rival.

   However, this problem of over-consumption is reduced to some extent by the government controlling the quantity of treatment (Refer to extract 1)

2. Moreover, the resultant over-consumption will correspond with **long waiting times**, **leading to loss of man hours**, thus **reducing productive capacity** of economy.

   In contrast in US, for the affluent and insured patients who consumed health care based on market prices, wait time is short (Extract 2, 3rd para).

3. Without profit motive, government hospitals have **lower incentive for R&D**. The govt as health care provider and custodian of society's interest is likely be engaging in it but rate of innovation should be lower than in rich countries like the US where profit-motive promotes technological advancement.

   In contrast, in the US, where prices are determined by market forces, the high price incentivises hospitals to innovate so as to provide improved services (e.g. advanced cancer treatment, Extract 2) for which the affluent and those with insurance are willing and able to pay.

   But in the single payer national system, the govt, who looks after society's interest and not profit, is likely to spend on basic research and hence could do better in this type of research.

4. By providing free health care, **the government spending on health will be high** and it will have significantly **lesser funds to spend on other areas like education** which can adversely affect the potential rate of economic growth. E.g. less spending on education result in lower rate of technological advancement.
   But in US the government, even though it doesn't provide free health care for all, also ends up spending a lot, even more (refer to calculation for (a).)

<u>Conclusion</u>
Stand: The single payer national health system is superior to the free market system for equitable access and cost efficiency (better outcome with less overall spending) but for allocative efficiency, both systems have their limitations.
While the govt controls the amount of treatment provided, free provision is likely to result in some over-consumption and hence allocative efficiency. As for which systems results in greater degree of over-consumption, the data doesn't provide enough information to make a judgment. With regards to the criteria of dynamic efficiency, one disadvantage is that it leads to slower rate of innovation in medical science due to the lack of profit motive.

	L1 1-2	Cut and paste relevant points – no explanation Only able to define the 2 systems		
	L2 3-4	2 sided but descriptive explanation with use of some data Or 2 sided analytical explanation with no use of data – max 4 only] Or 1 sided but analytical explanation with use of data		
	L3 5-6	2 sided with analytical explanation and use of data.		
	+1 only +2	Overall judgement Stand based only on theoretical conventional thinking: Not superior for all criteria – superior for equitable access but not for efficiency. Stand based on theory and data: Superior for equitable access and cost efficiency (better outcome with less overall spending) but for allocative efficiency, both systems have their limitations. As for dynamic efficiency, it is likely to give rise to slower rate of applied research due to lack of profit motive. [At least 2 evaluative comment that are substantiated with theory and data]		

(f) **In view of the public's concern with health care affordability, assess the Singapore government's move to bear a larger share of total health care spending.** [10]

Explain 'bear larger sharer'

Up to 2012, the Singapore govt' stand is that the individual should bear the main responsibility of meeting healthcare needs.

In 213, the govt changed its approach – it sought to bear larger share by providing more subsidies and paying for insurance for those who can't afford.

Yes, it is a good move

1. Healthcare is a necessity. Increase in level of subsidies plus creation of Medishield Life (an enhancement) will **enable all, including the poor to afford**. The **need is rising due to ageing population** with 20% of the population being age 65 or older by 2030 and research indicate that Singaporeans are increasing worried about heath care affordability (Extract 3).
   Without adequate funds and hence lack of ability to pay, some Singaporeans will not have any access to health care in their old age.

   Increase in subsidies will lead to lowering of MC. This lowers supply and lead to a fall in market prices.

2. Healthcare is a merit good. Currently, the Singapore government may not have subsidised enough and the market equilibrium is still not at the socially optimal level. [Students could back up this assertion by referring to table 1 that shows that the Singapore govt spends very little on health care relative to other DCs]. With adequate subsidies, the MPC is lowered enough for the supply curve to cut the demand curve at the socially optimal level.

No, it is not a good move

1. It will increase govt's overall spending **leading to possibility of running persistent budget deficits** and rising govt indebtedness – **this can have adverse macro implications**
   E.g. Rising public debt => less able to spend on skills upgrading & infrastructure in the future, MNCs lose confidence in country's LT growth potential and may relocate. To avoid debt, the government will have to

increases taxes and this can discourage work effort and discourage FDI. Increasing indirect taxes will have adverse effects on equity.

It could be argued that the Singapore government has amassed a high level of savings due to prudent fiscal policies – In figure 1, it can be seen that the government runs budget surpluses in most years. However, with an ageing population, the labour force will eventually shrink and this will reduce the taxable income base. Thus the problem of rising govt indebtedness is a valid counter argument.

2. Increase provision of subsidies at polyclinics & transfer payment to aid the poor to afford premiums for life-long healthcare cover under Medishield Life health care will discourage work effort which will lower potential growth.

   However, this effect shouldn't be that bad since the govt is not subsidising to the point that it is free. Moreover, the govt is opting for something like the single payer national health insurance model (though not exactly – in this model, the health service provider is private but in Singapore, govt is the provider and to a rather large extent) rather than UK national health service model. Even with the changes, the consumer would still need to co-pay treatment.

3. Increase spending on subsidies could lead to allocative inefficiency.
   Basic health care is a merit good that tends to be under-produced/consumed in the free market due to under-valuation by consumers about its MB, possibly due to ignorance – e.g. not bothering to undergo health checks and undertake early intervention. Thus, the government should provide production subsidies to bring consumption level up to the social optimal level. However, when the government increases its subsidies, there is the possibility of over-subsidisation resulting in over-consumption.

   However, the government is not subsidising up to the point where it is free which means that the over-consumption arising from subsidies should not be excessive and may think it worth the while if society values equity of distribution over efficiency of resource allocation.

<u>Conclusion</u>:

Whether the govt should bear a larger burden is dependent on whether it values equity over efficiency and the manner of the government's increased spending on health care.

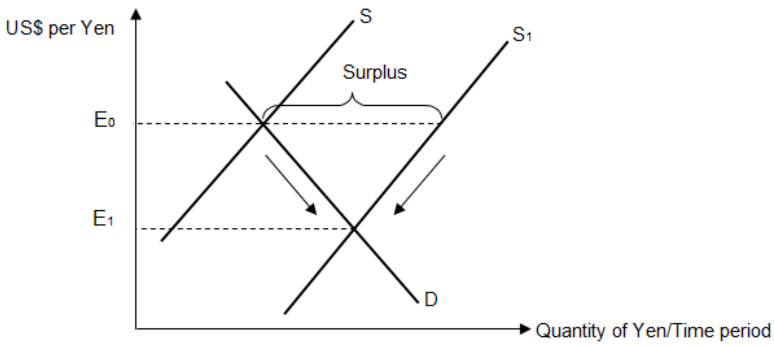
<u>Stand with substantiation</u>: With an ageing population, it is unavoidable that it needs to bear a bigger burden if the government increasingly values equity. But given its manner of increased spending, it should not result in too much trade off with efficiency. Moreover, its move can be said to be appropriate as long as it takes additional steps to avoid excessive rising expenditure and hence debt problems and the consequent trade-off with LT growth potential. E.g. it could adopt measures to help contain its rising spending on health care – E.g. 1) promote healthy life style (e.g. public education – healthy eating habits; subsidies exercise programmes) to reduce frequency of illnesses as mentioned in extract 3, 2) build in measures that limit the medical services that the govt-subsidised insurance can pay for (like in Canada); 3) continue to pursue policies grow the economy to obtain rising revenue from rising income to finance the rising expenditure on health.

L1 1-3	Cut and paste relevant points – no explanation
L2 4-6	2 sided but descriptive explanation or 1 sided analytical explanation with use of data

	L3 7-8	2 sided with analytical explanation and use of data. Shows awareness that stand is dependent on whether efforts at improving equity is at expense of some other goal (efficiency or growth) and/or nature of the increased spending on health by the govt but does not actually make a stand based on the context.		
	+(E1-2)	Overall judgement Makes qualified judgement on whether the move is likely to be positive or adverse with regards to trade off with efficiency and macro goals based on context (e.g. natured of the increased spending by govt on health, likelihood of debt problem). [At least 2 evaluative comments that are substantiated with theory and data]		

CSQ 2

(a)	**Compare Germany's government budget balance with that of USA between 2009 and 2013.**	**[2]**
	Similarity: Both saw an improvement in budget balance as a % of GDP. [1] Differences: • USA's budget deficit as a % of GDP has always been higher than Germany. [1] • USA experienced a budget deficit throughout the entire period while Germany experienced a budget deficit until 2011. Any 2 points.	
(b)	**Explain how slow growth could worsen a government's budget position.**	**[3]**
	A government's budget position is worsened due to increased government spending and/or falling / slower increase in tax revenue. With slow growth, there will be slowdown in the rise in income earned and firms will also see a slowdown in the rise in profits due to poor demand. Hence, the government's tax revenue from individuals and businesses will rise slowly which will worsen its budget position if the growth in tax revenue can't keep up with rising government spending. [2] An economy is likely to experience falling unemployment in times of slow growth since the economy is still growing. This would lead to a fall in the amount of unemployment benefits and transfer payments given out. However, the fall in unemployment benefits spending may not be enough to offset the fall in tax revenue growth. Therefore, there would be a worsening of the government's budget position. [2] An economy may be experiencing rising unemployment when growth slows because the slowing growth could be due to certain sectors suffering a contraction of demand causing affected firms to lay-off workers. This means the government will have to spend more on unemployment benefits. [2] When growth slows, the government may engage in expansionary fiscal policy in the form of increasing government expenditure or cutting direct taxes to stimulate C/I to prevent growth from slowing to the point of become negative. [2] **Impact on govt spending [2] + Fall in growth of tax revenue [2] = 3**	

(c)	**With the aid of a diagram, explain how quantitative easing by the Bank of Japan would result in the weakening of the yen.**	**[4]**
	With the increase in money supply in Japan, interest rate falls. This leads to an outflow of hot money due to lower rate of return on deposits. [2] Hence, there will be a rise in the supply of yen in the foreign exchange market which resulted in the weakening of the yen. [1] OR With the increase in money supply in Japan, people with excess money will buy more foreign assets or purchase more imported consumer goods. [2] Hence, there will be a rise in the supply of yen in the foreign exchange market which resulted in the weakening of the yen. [1] OR With the increase in money supply in Japan, interest rate falls. This leads to less inflow of hot money due to lower rate of return on deposits. [2] Hence, there will be a fall in the demand for yen in the foreign exchange market which resulted in the weakening of the yen. [1] + Diagram [1] 	
(d)	**Explain why officials in Korea and Thailand are concerned about the quantitative easing in countries like Japan.**	**[3]**
	Option 1 With a fall in interest rate in Japan leads to an inflow of short-term capital inflow into countries like Korea, Thailand and the US due to the “demand for higher yielding assets” (Extract 1). The appreciation of the Korean Won and Thai Bhat in the forex market leads to a fall in export price competitiveness for Korea and Thailand. Exports become more expensive in foreign currency while imports from Japan become cheaper in domestic currency. Assuming Marshal-Lerner condition holds, the value of net exports will fall causing the current account to deteriorate and GDP to fall as the AD contracts. [3] OR With greater inflow of short-term capital into Korea and Thailand, this would lead to a higher supply of loanable funds. If the excess funds are channelled to purchase of assets such as properties, this would lead to over-investment in the property market, causing asset inflation. [3] Option 2 Due to the weakening of the Japanese yen, Japanese goods and services are relatively cheaper. Countries will switch to buying Japanese goods and services instead of Korean and Thai goods and services. This leads to a fall in export revenue for Korea and Thailand and the value of net exports will fall causing the current account to deteriorate and GDP to fall as the AD	

	contracts. [3] OR Due to the weakening of the Japanese yen, Japanese goods and services are relatively cheaper. Korea and Thailand will see a rise in import expenditure as their domestic goods will be relatively more expensive. Assuming Marshal-Lerner condition holds, the value of net exports will fall causing the current account to deteriorate and GDP to fall as the AD contracts. [3] Explanation of 1 macro effect, with links, can get max 3m.	
(e)	**In light of the problems described in Extract 7, discuss the view that USA and Germany should adopt fiscal consolidation.**	**[8]**
	<u>Intro</u> The global recession in 2009 which resulted in slower or negative growth and unemployment led governments to implement expansionary fiscal policy to revive their ailing economies. However, Extract 7 discusses how budget debt in countries is hurting growth and unemployment. Hence, some leaders felt that there was a need for fiscal consolidation which refers to austerity measures which include reducing government spending and raising taxes such as personal income tax and corporate tax. However, others were arguing against fiscal consolidation as the economic recovery was still slow. <u>Body</u> **Thesis: Fiscal consolidation should be adopted** 1. To boost consumption (C) and investment spending (I) Expansionary fiscal policy which involves tax cuts and increased government spending resulted in huge government deficit for countries such as the USA (-12.8% of GDP from Table 3). This led to creditors demanding higher interest rates due to fears that the governments could not repay their loans (Extract 7). Hence, fiscal consolidation is necessary to reduce government debt to boost households and firms' confidence in the economy and to encourage lower interest rates. This is to stimulate C and I and hence AD. An increase in AD would lead to a multiple increase in national income (could include the AD/AS diagram showing a rightward shift in the AD curve) which in turn would increase production and hence increase the demand for labour which would reduce unemployment. Evaluation: The ability for governments to encourage C to boost growth and employment would be significant for USA and Germany where domestic consumption was a large proportion of GDP (>55% from Table 6). 2. To allow for more policy options in the future The large amount of debt will hinder the governments' ability to exercise expansionary fiscal policy when there is recession in the future due to a lack of government reserves. This will cripple the governments' ability to reduce problems of growth and unemployment in a recession. Overall evaluation: Overall, USA's budget deficit is large and consistently greater as a % of GDP as compared to Germany (Table 5). Hence there is a greater reason for USA to carry out fiscal consolidation. **Anti-thesis: Fiscal consolidation should not be adopted** 1. Fiscal consolidation reduces G, C and I Decreasing government expenditure and raising taxes would lead to a fall in AD. Higher personal income tax rates means that households will have lower disposable income and hence likely to spend on consumer goods to satisfy their wants. Higher corporate tax rates also reduce the post-tax expected rate of returns for firms. With lower returns from their investment, firms are less likely to demand more capital goods. The overall fall in G, C and I will lead to a fall in AD and a multiple fall in national income. In addition, there will be a fall in production which reduces the	

demand for factors of production like labour which worsens unemployment.
Evaluation: USA would be more cautious about the impact of fiscal consolidation on unemployment as her unemployment rates are high and steadily greater than that of Germany's (Table 4).

2. Inability to rely on export-led growth
In times of a global recession, these countries cannot rely on exports to boost growth. Fiscal consolidation should not be adopted as it will exacerbate the country's growth and unemployment problems. This is especially so for Germany who would suffer significant negative effects of a global recession as its exports take up 45.6% of its GDP. Hence, it would have to rely on expansionary fiscal policy instead to boost its economy.

3. Reducing government spending results in greater inequity
Cuts in government spending will mean less unemployment benefits or handouts for the lower income households. This means that they may not be able to afford basic goods and services due to a fall in purchasing power.

4. Negative effects of higher taxes
An increase in personal income tax may cause a disincentive to work as the marginal returns from work effort is reduced. Such taxes may even cause highly paid skilled labour to relocate to countries with lower income taxes. In addition, high corporate taxes create a disincentive to invest and accumulate capital due to lower after-tax profits and may even cause capital flight as firms relocate to countries with lower corporate tax rates. This reduces a country's productive capacity and hence lowers potential growth.

<u>Conclusion</u>
Fiscal consolidation could worsen or improve a country's macroeconomic problems. Whether or not a country should pursue fiscal consolidation depends on the severity of the budget deficit and the state of the economy.

Evaluation: The USA should consider fiscal consolidation more seriously due to a large budget deficit which could continue to hurt its economy. However, both countries still face low growth and unemployment, hence, they need to reconsider the need for fiscal consolidation.

L1	A very brief explanation of the impact of fiscal consolidation on the problems mentioned in Extract 7.	1-2
L2	- A well-developed but one-sided explanation of how fiscal consolidation can address OR worsens the problems mentioned in Extract 7. OR An underdeveloped two-sided discussion of how fiscal consolidation can address AND worsens the problems mentioned in Extract 7. - Some reference to context	3-4
L3	- A well-developed, two-sided discussion of how fiscal consolidation can address AND worsens the problems mentioned in Extract 7. - Good reference to context.	5-6
E	A well-justified judgment about whether fiscal consolidation should be considered based on	+2

	1. Government budget deficit and 2. State of the economy (i.e. growth rates, unemployment rates)	
(f)	**Discuss whether China should rely on her domestic market or exports to drive growth.**	**[10]**

Intro

Due to greater vulnerability to external shocks due to the pursuit of export-led growth as well as the global slowdown, this has led to countries switching to relying on their domestic consumption to drive growth.

Body

China should rely on their domestic markets to drive growth

1. Reduce vulnerability to global shocks. Relying on domestic demand would be more stable. This would reduce the fluctuations in GDP and demand-deficient unemployment due to a fall in exports and FDI.

With China's large domestic market due to her large population, this could enable her to potentially rely on domestic consumption to drive growth. With urbanisation leading to rising incomes (Extract 9), this could lead to higher spending on domestic goods, leading to higher C and AD.

However, currently, according to Table 6, consumption in China is only 36% of GDP, which is rather low as compared to other countries such as USA (>60%) and Japan (about 60%). This could be due to the Asian thrift culture as well as "lack of financial security" (Extract 9) in China due to the lack of a social safety net. According to Extract 9, there is a need to lower personal income tax and provide more transfer payments to increase disposable income to encourage consumers to spend more, hence increasing household consumption. Given the large population of China, this might exert a strain on the government budget and would eventually require increases in tax to fund the additional government spending.

2. Producing for the domestic market would mean a move towards less energy-intensive industries. Reliance on energy-intensive heavy industry for the production of exports has led to pollution and negative externalities for China (Extract 8). ~~This~~ The switch to less energy-intensive industries would lead to lower pollution and hence less adverse impact on environment through a fall in carbon emissions, for example. This would lead to an improvement in the non-material standard of living as would present a more sustainable growth path as it does not exert too much pressure on the environment.

3. Producing for the domestic market would lead to improvement in external imbalances. China's large trade surpluses have led to external imbalances and "tensions with other trade partners" (Extract 8). As her trade partners would suffer from trade deficit which results in lower growth and higher demand-deficient unemployment, they may blame China and implement protectionist measures such as tariffs or quotas to protect their domestic industries. This would stifle China's exports and hence stifle growth, leading to demand-deficient unemployment. Hence, producing for the domestic market would lead to lesser likelihood of such issues.

China should rely on exports to drive growth

1. China should tap on global demand to increase demand for their exports, hence leading to an increase in AD and a multiple increase in national income. This would lead to higher growth and lower demand-deficient unemployment. This is important as China was able to achieve high growth rates in the past due to increase in exports. A shift to relying on domestic markets might lead to slower growth if the increase in C is insufficient to make up for the fall in X. The lack of government provision of welfare payments or a social safety net might lead to Chinese consumers continuing to save a high proportion of their income (Extract 9), hence limiting the increase in C.

2. When China reduces its reliance on exports, the process of rebalancing could lead to structural unemployment as workers who are unemployed in the export-oriented industries might not be able to secure jobs in the rising sectors catered at the domestic market due to a mismatch of skills. With the “shifting from capital-intensive manufacturing to labour-intensive services” (Extract 9), this would mean that those in the manufacturing sector producing for the export market might face structural unemployment if they are unable to secure jobs in the growing services sector.

Conclusion

With a large domestic market, China has the potential consumer base which means that switching to **rely on her domestic market is a viable option** to export-led growth.

The transition from export-led to domestic driven growth will lead to challenges such as higher structural unemployment hence the government needs to implement policies to enable transition from producing for the international market to producing for the domestic market. In addition, there is a need to produce more consumer goods and services rather than focus on energy-intensive heavy industry (Extract 8) to reduce the negative impact on the environment.

L1	- A brief description of the positive or negative impacts of relying on domestic markets	1-3
L2	- A one-sided explanation of how relying on domestic markets would lead to positive OR negative impacts for China in terms of achieving macroeconomic goals OR - A weak two-sided explanation of the positive AND negative impacts of relying on domestic markets for China - Some use of evidence from the data	4-6
L3	- A well-developed discussion of the positive AND negative impacts of relying on domestic markets for China - Good use of the evidence from the data	7-8
E	- Stand with strong justification, with reference to the potential of switching to reliance on China’s domestic market and its success or the issues which might hinder the success of the switch in growth strategy.	+2