



Yishun Junior College
2017 JC2 H2 Economics
Paper 2
Preliminary Examination
Suggested Answers, Marking Schemes & Markers' Comments

Question 1

(a) i) With reference to Figure 1, describe the trend in the world price of steel [2] between March 2009 and March 2016.

Suggested answer:

World price of steel generally rose between Mar 2009 to end 2011 before decreasing generally until Mar 2016.

ii) With reference to the case material, account for the change in world [4] price of steel in 2015.

Suggested answer:

World price of steel generally fell in 2015.

A fall in price could be due to decrease in demand and/or increase in supply.

Reason for the decrease in DD:

1) The decrease in global demand for steel stems from the fall in demand for steel from China, Brazil and Russia. And since China is responsible for nearly half the global metals demand, a decrease in demand from China due to slow-down in the construction industry will lead to a large (extent) fall in global demand.

(Must capture 1) decrease in global demand + 2) either China is responsible for nearly half the global demand or decrease in demand from China due to slow-down in construction industry to score 2m)

Reasons for the increase in SS:

1) Overcapacity in China (Ext 1 P3) could have led to increase in SS or over-supply of steel to the world market. This can be seen from Ext 3 P4 that China government is aiming to shut down facilities producing 100 to 150 million tonnes annually by 2020.

China could also be dumping their steel into the global market. This will increase in SS of steel in the world market at low prices. This can be seen from Ext 3 P2 and 5 where China's steel exports reached a record 112.4m tonnes (19% increase) but value fell by 10.5% (prices would have decreased by approximately 30%)

(b) i) Explain one example of negative externality which could result from steel [2] production.

Suggested answer:

- 1) Greenhouse gases emissions causing global warming
- 2) Air pollution affecting the health of population and visibility in country.

Must capture 3rd parties and the adverse 3rd party effects

ii) Explain how negative externality in steel production could lead to market failure. [4]

Suggested answer:

- 1) Greenhouse gases emissions and air pollution are negative externalities which are negative spill-over effects on 3rd parties → $MEC > 0$. $MSC = MPC + MEC \rightarrow MSC > MPC$
- 2) Since individuals only consider marginal private cost and benefit in their decision-making, market/private equilibrium will be when $MPC = MPB \rightarrow E_p \rightarrow Q_p$
- 3) However, society welfare is maximised when $MSB = MSC \rightarrow E_s \rightarrow Q_s$
- 4) Since $Q_p > Q_s \rightarrow$ over-production of Q_s units → market failure / welfare loss

iii) As an economic advisor, evaluate the measure undertaken by the Chinese government (from Extract 3) in tackling the negative externalities associated with steel production and recommend an alternative option to the Chinese government. Justify your answer. [10]

Suggested answer:

Measure undertaken = regulation (setting standards, emission limits or environmental rules)

Explanation of how measure work to tackle negative externalities:

- The Chinese government probably have 'calculated' the optimal level of emissions and in turn set emission limits for firms.
- Firms are supposed to abide by these limits and reduce their emissions through reduction in production or adopting cleaner methods of production.
- This will reduce the amount of negative externalities to the socially optimal level.

Evaluation of effectiveness of measure in tackling negative externalities:

- While setting emission limits could be difficult to monitor and enforce, the Chinese government has granted new powers to the environment ministry to check on the firms and summon senior provincial officials to explain their conduct. This has tightened the enforcement of rules and regulation.
- However, having to send inspection teams to over 1,000 steel enterprises across the country will mean that the monitoring cost could still be very substantial and impose a burden on the government's budget.

Overall judgement:

- This measure seems to have worked well as 173 firms were found to have violated the environmental rules with 23 of them having been asked to cut production while another 29 had to shut down temporarily to rectify their problems.
- However, the long-term effectiveness will depend on whether the government will ensure that monitoring efforts persist.

Alternative options = subsidy into R&D for cleaner production methods, taxation on

emissions/production or others

Repeat above process for 1 of the alternative options.

L1	able to describe how both measures work or state some limitations or unintended consequences	1 – 2
L2	Able to explain clearly how both measures work only (1-sided) Or Able to explain how both measures could be limited in effectiveness or unintended consequences (1-sided)	3 – 5
L3	Able to explain and evaluate how both measures may or may not tackle the negative externalities	6 – 7
E	Able to provide value judgement on the overall or relative effectiveness of the measure(s)	1 – 3

(c) Discuss if UK and EU should adopt protectionist measures against Chinese steel in circumstances described in the case material. [8]

Suggested answer:

UK and EU governments should adopt protectionist measures against Chinese steel:

- There is a possibility of China dumping steel into UK and EU.

As highlighted in Ext 4, China's steel exports reached a record 112.4m tonnes (up 19%) but their value fell 10.5% as a result of falling prices. This has led to European and UK steel factories to close down and putting thousands of jobs at risk. The same could be said to have happened to US as well. Therefore, UK and EU government should adopt protectionist measures to protect their own producers from being driven out by foreign (unfair) competition.

In fact, Ext 4 further highlighted that Chinese-made steel exports enjoyed a tax rebate policy or the Chinese-made steel products have enjoyed unfair subsidies from the government.

- Protection jobs in the home industries

Regardless of whether there is fair competition (cheap imports due to CA) or unfair competition (cheap imports due to government subsidies). UK and EU governments should adopt protectionist measures to protect the jobs and incomes of workers in the steel industries. By ensuring that the local firms can withstand the foreign competition, production will continue and that will provide jobs and income for UK and EU steel workers.

- Environmental concerns (can accept, but this wasn't presented in the notes)

UK and EU governments may adopt protectionist measures against Chinese steel for environmental reasons. It is quite clear from Ext 2 and 3 that Chinese steel firms are highly pollutive. Some more argue that the low prices could be the result of lack of adoption of cleaner but expensive production methods. Therefore, by putting (for example) a tariff on

Chinese steel, the quantity demanded for Chinese steel will fall and lesser pollution will be created.

UK and EU governments should not adopt protectionist measures against Chinese steel:

- China may have the comparative advantage in steel production or UK and EU do not have the comparative advantage

Ext 2 mentioned that there is overcapacity of steel output in country. This could be due to China's factor endowment in cheap low-skilled workers or low-cost land which has resulted in lower opp cost of production. As mentioned above, the older (but dirtier) production methods could also be cheaper. Therefore, China may indeed have the comparative advantage in steel production.

What more, if US should impose 522% tariff on Chinese steel, clearly the opp cost for producing steel in US is way higher than China. And since UK and EU are similar in the stage of economic development as US, UK and EU are not likely to have the comparative advantage in the production of steel.

Overall judgement

- It is probably true that China indeed has the comparative advantage in steel production and importing the cheaper steel into UK and EU will benefit the steel users or importers.
- Also, the argument that China is dumping their steel is difficult to ascertain due to lack of information on the actual marginal cost of production.
- And if UK and EU should protect against Chinese steel, it could invite retaliation by China which will adversely impact UK's and EU's exports to China.
- Therefore, EU and UK should not adopt protectionist measures against Chinese steel.

L1	able to describe the case for and against protectionism	1 – 2
L2	Able to explain clearly the case for OR against protectionism (1-sided)	3 – 4
L3	Able to explain clearly the case for AND against protectionism (2-sided)	5 – 6
E	Able to provide value judgement on whether protectionism should be implemented E1 = stand + some attempt to justify E2 = stand + good attempt to justify	1 – 2

Question 2

a Compare the economic growth of China and Japan between 2010 and 2015. [2]

Suggested Answer

- Direction: Both generally decreased (similarity)
- Sign: Both countries generally experienced positive growth, except Japan in 2011 (difference)
- Level: China has higher economic growth than Japan throughout/always (difference)
- Volatility: China's experienced a steady decrease in economic growth whereas Japan's economic growth tended to fluctuate (difference)

b Explain how 'the health of the labour market' can be a key indicator of economic growth. [2]

Suggested Answer

Health of the labour market, e.g. employment rate (leading indicator), increase in employment, increase household income and purchasing power, and hence consumption increases, AD rises, leading to actual growth.

Or

With stronger economic growth, there is more production. As firms increase production, the demand for factors of production would increase, resulting in higher employment rate, and higher national income for the next period.

Other indicators of the labour market:

<http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm>

c Explain why the Chinese government "wants to switch from relying on external demand to domestic demand in generating growth" (Extract 4). [4]

Suggested Answer

(Either explain the costs of relying on external demand or the benefits of focusing on domestic demand)

Benefits of focusing on domestic demand:

- More stable economic growth/Less cyclical unemployment: less vulnerable to external shocks China has large domestic market, or domestic market consumption (C) tends to be more stable compared to external demands and FDI.
- Less structural unemployment: Domestic taste and preferences more stable than demand patterns of export markets - less structural changes needed
- Potential for future actual growth: Current C/GDP in China is 38%, hence there is potential for increase in this ratio to bring about greater economic growth

d With reference to Extract 6, explain why Japan has been experiencing slowing growth in the second quarter of 2015. [4]

Suggested Answer

1. Slow increase in X or C (extract 6) – weak exports, poor consumer spending or Slow

increase in I – raising doubts of outlook (for identifying the component that is affected)

2. AD increases slower than before
3. Adjustment process –
 - a) unplanned running down of stocks → firms increase production but at a slower rate → employment, factor income increases at a slower rate
 - b) national income increases at a slower rate, hence slowing actual growth via the multiplier process

e Discuss whether expansionary fiscal policy implemented by the [10] governments of China and Japan in achieving sustained growth have been appropriate.

Suggested Answer

- Define sustained economic growth
- Explain how expansionary fiscal policy brings about sustained growth
 - Impact on AD and equilibrium national income
 - Impact on AD and full employment national income
- Discuss - 'appropriate government policies':
 - China:
 - Policy is appropriate as the government is seeking to rebalance the economy (Extract 4); hence increasing G, C and I via expansionary fiscal policy would be in line with these efforts
 - However, in view of the mounting debt of the Chinese government (Extract 5), the policy may not be feasible. As the government implements expansionary fiscal policy, the increase in spending and fall in tax receipts would worsen the government debt. This may lead to a fall in the country's credit rating and hence limits the country's capability to raise funds in the future / decrease investors' confidence in the country (consequences).
 - At the same time, China is facing overcapacity (Extract 5) and the increase in construction of infrastructure may worsen the problem of overcapacity. Whilst there may be potential growth, AD may not rise in tandem and thus the measure may not be effective in bringing about sustained growth.
 - Japan
 - The proportion of C to GDP is relatively large for Japan (Table 3), hence the increase in C would have a significant impact on AD (i.e. increase in C would be sufficiently large), thus making expansionary fiscal policy effective and appropriate.
 - However, Japan is facing sluggish consumer spending (Extract 6). If this is due to lack of optimism in the economy, then consumers may not be responsive to the fall in direct tax to increase consumption. Thus the resultant increase in C may be small and may not be effective to bring about sustained growth.
 - At the same time, one of the root causes of the slowdown is weak export growth (Table 6), which expansionary fiscal policy is unable to address directly, hence lowering the effectiveness of the policy.
 - Japan is facing high public debt (Extract 7). As the government implements expansionary fiscal policy, the increase in spending and fall in tax receipts would worsen the government debt. This may lead to a fall in the country's credit rating and hence limits the country's capability to raise funds in the future / decrease investors' confidence in the country (consequences).
- Evaluation
 - Given that both economies face rising debt, the feasibility of expansionary fiscal policy is questionable.

- The focus of expansionary fiscal policy for both economies should differ: for China's case, the focus in the short run should be on increasing AD so as to increase the usage of currently unused factories. For Japan's case, the focus in the short run would be to increase the optimism of households and firms to increase AD.

L1 (1-2)	For an explanation of how fiscal policy brings about sustained growth only, or for a one-sided analysis of how the policy is/is not appropriate.
L2 (3-5)	For an explanation of how fiscal policy brings about sustained growth, and an analysis of how the policy is appropriate or not (for both China and Japan, or lumping both countries together, w/o mention of specific problems).
L3 (6-7)	For an explanation of how fiscal policy brings about sustained growth, and an analysis of how the policy is appropriate or not, with reference to the specific problems for both China and Japan.
E (1-3)	For an overall evaluation of how the policy is appropriate, given the context of China and Japan.

f Japan's Prime Minister holds the view that the country can achieve [8] economic growth and in so doing reduce the level of government debt through increased spending. Discuss the validity of this view.

Suggested Answer

Japan can spend its way to growth

- While C and I are still weak, government takes the lead to stimulate domestic spending
- Explain expansionary fiscal policy - $\uparrow G$, $\uparrow AD$, adjustment process, \uparrow employment \uparrow real GDP

Antithesis1: Growth may not take place due to other factors

- Poor consumer sentiments (weak recovery in consumer spending)
- Domestic demand is not strong, overspending on infrastructure may only lead to overcapacity on supply-side
- If additional spending is financed from borrowing – possibility of crowding out effect – AD may not increase as I and C falls

Increase income will lead to reduction of national debt

- \uparrow employment - \uparrow household income - \uparrow income tax collection; in addition, government can reduce spending on welfare payments when employment increases
- Economic expansion - \uparrow firms' profits - \uparrow corporate tax collection
- Improved confidence - $\uparrow C$, $\uparrow I$ – leading to yet further expansion and hence more tax revenue

Antithesis2: National debt may not be reduced from the expansion efforts.

- Additional and massive spending may come from borrowing which further increases debt burden, i.e. increase in borrowing is greater than the increase in government revenue generated.

Overall Evaluation

L1 (1-2)	For an explanation of the components of the view with errors in analysis
L2 (3-4)	For a one-sided analysis of how the view is valid, or a balanced (descriptive?)

	<u>explanation</u> of how the view may or may not be valid, without application to context.
L3 (5-6)	For a balanced <u>analysis</u> of how the view may or may not be valid.
E (1-2)	For an overall evaluation of how the view can be valid in the context of Japan.