

2016 H1 Prelims Suggested Answers

Case Study 1

- (a) **With reference to Extract 1, identify and explain one demand factor and one supply factor causing the price of oil to fall considerably in 2014.** [6]

Explain fall in demand

Weak econ activity → demand for less oil as factors of production

Growing switch to other fuels

Explain the rise in supply

Rise in shale oil production by US

Saudi did not curb their production

Max 3m for demand and supply factors well explained

Explain that the rise in supply is greater than the fall in demand [3]

Extract mentions that there are lots of spare supply of oil and that the switch to other fuel may not be that significant

Explain the fall in price of oil

Due to the surplus, there is a fall in the price of oil

- (b) (i) **Describe the trend in the current account balance in Malaysia between 2009 and 2015.** [2]

Current account is in a surplus [1] but the surplus (as a percentage of GDP) is decreasing [1]

- (ii) **Explain a possible reason for the trend above.** [2]

Due to the falling oil prices, export revenue of oil will fall. As export revenue is part of the current account balance, this will lead to a worsening of the current account balance. [2]

Accept other possible reasons

- (c) **Explain how falling oil prices affect the government budget balance and the value of Malaysian ringgit.** [4]

Government budget balance worsens [1]. Falling oil prices lowers the government's oil-related revenue [1].

Malaysian ringgit depreciates [1]. With a fall in the level of exports, the demand for Malaysian ringgit falls. This causes the external value of Malaysian ringgit to fall [1].

- (d) **According to Extract 2, “analysts generally consider that long-term economic benefits (of the removal of fuel subsidies) are numerous.” Explain one long-term economic benefit that Malaysia can reap with the removal of fuel subsidies.** [2]

Government can channel the funds to areas of the economy that can drive growth. This will increase the AS in the long run, promoting potential growth in the economy [2].

- (e) **Analyse the impact of falling oil prices on both the households and firms in Malaysia and in Singapore.**

[6]

Impact on households and producers in Malaysia

Higher expenditure on Malaysian households because with the falling oil prices, the government is removing the fuel subsidy. This is made worse on the lower income group because the price of the necessity will go up. This lowers the material SOL of the citizens.

As for the producers, they will also feel the impact on rising fuel prices due to the removal of subsidy. This increases their cost of production, causing a fall in profits.

For oil exporting firms, they will also suffer a loss in profits because of the falling oil prices, total revenue falls.

Impact on households and producers in Singapore

Households will reduce their expenditure due to lower electricity tariff and lower pump prices.

As for the firms, it depends on which types of firms they are. For firms which requires oil as a factor of production, they see a fall in their cost of production, thus raising their profits. But for firms that rely on demand from oil business, they see a fall in their revenue, thus losing profits.

2m for each well-explained impact on each group of people

- (f) **In light of falling oil prices, discuss whether the shift in Singapore's growth strategy will help Singapore to achieve a sustained economic growth into the future.**

[8]

Explain what is meant by sustained economic growth

Increase AD together with the rise in LRAS

Explain why the need for Singapore to shift

With falling oil prices, Singapore cannot always depend on oil refinery for growth. As seen from Extract 2, industries that rely on demand from the oil business are making losses and retrenching workers. As such, there is a need to shift so as to develop a CA in other areas that will help Singapore achieve economic growth.

Explain why the shift may be able to help Singapore achieve economic growth

Evidence from Extract to explain how AD and AS can be increased in the long run, promoting potential economic growth

- Need for Singapore to shift from value-addedness to value creation
- Singapore has identified 5 new areas to develop in future
- Trying to deepen skills and innovation and promote the SMEs
- Encouraging SMEs to come up with new products which we can have a comparative advantage in → increase our level of exports in future → increase AD

Explain why the shift may not be sufficient to help Singapore achieve a sustained economic growth

- Singapore is experiencing an ageing population → MNCs may not want to invest in Singapore. Even as we are trying to promote SMEs in our country, MNCs are still very important now to help promote growth in our country. With

globalisation, there is free movement of labour and capital, MNCs are able to shift to other countries. As such, it is important for Singapore government to also find ways to attract these MNCs into our country.

- Policies to increase AD are also important to aid our actual economic growth. Without a rise in AD, a rise in LRAS is not sufficient to sustain economic growth into the future
- With such a shift to deepen skills, some of the workers who do not have the relevant skills may face structural unemployment → wastage of resources
- It is assuming that the government has identified the right areas of developments. As the world is now very dynamic, the government must ensure that the areas which are identified for development are able to stay competitive in the world

Conclusion (overall judgement)

Good that the Singapore government is able to shift to other new areas because in the age of globalisation, Singapore cannot remain stagnant and continue to rely on export-led growth. Other countries may gain comparative advantage in oil refinery, for example, and this will bring about adverse effects to our economy.

Case Study 2

(a) (i) Compare the government budget balance of Germany with that of Greece between 2011 and 2015. [2]

- Greece's government budget balance was in deficit throughout whereas for Germany, its budget balance was initially in deficit but from 2014 onwards was in surplus. (1m)
- Both countries experienced an improvement in its fiscal position over the period. (1m)

(ii) State the likely impact of the change in government budget balance on the overall debt level in Greece. [1]

- The overall debt level in Greece is likely to increase. (1m)

(b) (i) With 'lowered interest rates' in Germany, identify one possible injection that would change and state the change that would occur. [2]

- Investments (1m)
- Increase (1m)

(ii) Using economic analysis, explain how Germany brought down its overall debt. [3]

- The rise in investments will lead to an increase in AD, and real national incomes will increase by multiples.
- As household incomes and firms' profit levels increase, so will income tax and corporate tax, thereby increasing the government's collection of tax revenue.
- In addition, the rise in incomes will also lead to a rise in induced consumption, thereby increasing the amount of GST collected by the government.

(c) With reference to the data, comment whether living standards in Greece is higher than that in Germany. [6]

- Greece's SOL can be perceived to be higher
 - Citizens receive extensive amounts of pension payments by the government (E6P1), which means even when people stop working, they still enjoy significant purchasing power. Material SOL is high.
 - Retirement age is relatively early at 61 (E6P2), thereby giving citizens much leisure hours upon retirement. Non-material SOL is high.
- Germany's SOL can be perceived to be higher
 - Germany's work hour per week is relatively short at 35.6 (E6P2), which means working population enjoys much leisure time. Non-material SOL is high.
 - Employment rates are rising (E5P3) and the country is experiencing positive growth rates (E5P3) which means real incomes are rising and therefore households are enjoying higher purchasing power. Material SOL is high.
- Overall, Greece may possibly be enjoying higher SOL currently due to the attractive pension system that the government implements for its people, allowing the Greeks to enjoy high living standards even after retirement. However, considering that government debt levels are rising, and that the government is increasingly struggling to sustain this pension system, the Greeks may experience lower living standards in the longer term. In contrast, positive growth rates and employment levels may help Germany to enjoy higher SOL into the future.

(d) With reference to Extract 7, discuss the impact of the financial crisis on the economy of Greece. [8]

- Short-run:
 - Financial crisis results in falling real incomes. Households reduce consumption and thus further reducing AD, leading to a contraction in its economy.
 - As firms cut back on production, they hire fewer resources including labour, and this causes greater cyclical unemployment, which raises the overall unemployment rate.
 - Material SOL worsens as citizens face severe material deprivation, i.e. they are unable to afford basic necessities (E7P4).
- Long-run:
 - As the crisis persists, structural unemployment occurs since they become less employable over time and that re-entering the workforce becomes more difficult and expensive (E7P3).
 - The crisis has also caused the government to implement budget cuts, which led to the closure of many healthcare facilities (E7P5), and thus reducing the accessibility to healthcare.
 - The rise in unemployment rates and reduced access to healthcare will eventually cause non-material SOL to fall.
 - The crisis has also caused dwindling economic prospects for Greeks which led to large emigration of its citizens to other countries like Germany (E7P6).
 - The brain drain and emigration, worsening in the quality of health, and rising structural unemployment which eventually causes falling out of its citizens from the labour market, will lead to a fall in its productive capacity, thus leftward shift in its LRAS.
- Evaluation:
 - The crisis has much negative impact on the Greek economy and on its citizens. In terms of severity, the crisis will have a larger impact on the country in the longer term than in the shorter term. Whether Greece will have to “face further economic hardship” (E7P1), will depend on how fast and drastic the government responds to the crisis.

*Alternative approach could be to analyse the impact on the internal and external economy.

(e) With reference to the data where appropriate, assess the extent to which fiscal and monetary policies are effective in solving the debt problem in the Euro zone. [8]

- Fiscal and monetary policies can be effective in solving a country's debt problem.
 - When a government implements EFP/EMP, the rise in components of AD, eg G, C, I will lead to an increase in AD, which increases real national income by multiples.
 - Government will be able to collect more tax revenues from higher income and corporate tax, as well as GST.
 - Assuming government expenditure does not increase more than tax revenue, continuous increase in tax levels will improve the government's fiscal position and thus reduce debt levels.
- But fiscal and monetary policies may not be the solutions to solving the debt problem in the Euro zone.

- As fears lurk within the economy (E8P3), a lower tax rate does not encourage private spending and investments. Governments in Europe have indeed witnessed a slowing response to tax cuts. Furthermore, government spending from the ECB (E8P3) only served to worsen the debt problem rather than to solve it.
- Lowered interest rates or even negative interest rates also does not help solve the debt crisis in the Euro zone as consumers and investors are increasingly interest inelastic (E8P4). Negative interest rates as a drastic measure also backfired, as it signalled to consumers and SMEs that economic outlook is bleak (E8P4).
- Evaluation: Current fiscal and monetary policies are effective to a small extent.
 - In such a situation, usual EFP and EMP without drastic measures cannot solve the Euro zone debt crisis.
 - Loans by ECB to governments need to be regulated more tightly and that government spending needs to be more purposeful, eg towards financing productive enterprises or education, which will drive economic growth (E8P1).
 - Confidence is low in the region. Much efforts needed to raise level of consumer and investors' confidence before any of these two policies can be effective.
 - SS-side policies need to be implemented together with DD-management policies to create a more favourable environment for investments and long-term growth. Eg economic restructuring to reallocate resources into more productive industries.
 - Only with healthy economic growth, like the case of Germany, can government reduce debt pile (E5P2).

Suggested answer Essay Q3

3 (a)

Explain why market fails in the case of public goods

- State that public goods are goods that exhibit 2 characteristics:
 - Non excludable
 - Non rivalrous in consumption
- Explain the implication of each characteristics.

	Non-excludability	Non-rivalrous in consumption
Definition	A good is non-excludable when it is impossible or very costly to exclude non-payers from consuming it.	A good is non-rivalrous in consumption when the consumption of the good by one person does not reduce the amount of satisfaction of the next person consuming the same good.
Implication	Non-payers can also enjoy the good or service, leading to the free ridership problem . Consumers will not reveal their preferences and there will be no effective demand .	To provide the good for an additional consumer, no additional resources are needed. Thus, the marginal cost of producing an additional unit of good for the next person is zero. As society aims to be allocative efficient, price equals marginal cost, and since the marginal cost is zero, $P=0$. There is no incentive for producers to supply the good at all.
As a result	There will be no price signal and the good or service will not be provided by the free market. There is no resources are allocated to the provision of public goods.	

- Explain that in the case of public goods, there is complete market failure. As there is no signal of effective demand and supply in the market, no resources will be allocated to the production of the good in the free market. Hence there is complete market failure.

Explain why market fails in the case of merit goods

- Goods that the government deem to be good for people but they tend to consume too little of it because they are not fully aware of the benefits of consuming the good and that the consumption of the good generates large amount of positive externalities.
- Generates positive externalities
- Examples – education, preventive health care
- Explain the possible externalities generated from the consumption of a merit good eg education.
 - In consumption of education, there are positive spill-over effects such as the higher productivity that is being benefitted by a future employer, or the other values and qualities such as civic mindedness spilled over to others in the society.

- Explain how the presence of positive externalities lead to market failure.
 - The presence of positive externalities leads to the divergence between MSB and MPB as MEB on third parties not accounted for.
 - Explain that the private optimal consumption level < social optimal level, therefore under allocation of resources to the consumption of education. [Illustrate with diagram]
 - State the welfare loss, hence there is market failure.

Alternative explanation

Explain how due to presence of imperfect information, consumers are unaware of the full extent of the benefit of consuming merit goods like education, thus undervalues the MPB, leading to under allocation of resources for the consumption.

(b) Introduction

- State that as market fails in the case of public goods and in the consumption of merit goods, there is a need for government intervention to correct the market failure.

Development

- Policy adopted to correct market failure in the case of public goods:
 - Direct provision by the government
 - When there exists complete market failure, as in the case of public goods, there is a need for direct provision.
 - Since goods/services like national defence and law enforcement are non-excludable and non-rivalrous in consumption, there exists a missing market and no producer will be willing to produce the good/service even though provision of the good/service benefits the society.
 - Thus in order to ensure efficient allocation of resources the government directly provides for the good.
 - However, it is difficult for government to have complete knowledge of the right amount of the good to be provided. (information failure)
 - In addition, such policy puts a strain on government's budget which can be used to develop other sectors, which are important to aid economic growth in the country

- Policies adopted to correct market failure in merit goods:

1. Legislation to encourage consumption/production of merit goods (Rules and Regulations)

- Legislative Acts such as Hepatitis B Immunisation Programme for children under 12 years old
- Simple to implement, relatively easy to administer
- [Limitation] high administrative cost eg. regulatory checks require manpower
- [Limitation] distort workings of price mechanism
- Also, in Singapore, we have policies to protect intellectual rights so as to encourage more innovations and research. These policies include patents and copyrights.
- However, such policies protect the incumbents and may give rise to market inefficiency.

2. Subsidies

- Giving subsidies equivalent to the external marginal benefit to increase consumption/production of healthcare services (illustrate and explain using diagram shift of MPC/MPB curve)
- [Application] In S'pore context, subsidies/tax incentives are given to private healthcare providers to encourage provision/ improve quality of healthcare services
- [Limitation] hard to measure the extent of subsidy to fully internalize the different types of positive externalities exhibited due to complexity and inaccurate information
- However, these methods may breed inefficiency as the organizations receiving them may not have the incentive to find the lowest possible cost of providing the services.

3. Provision at a subsidized rate/ zero cost

- Government hospitals providing subsidized medical services as compared to private hospitals
- State-owned medical centers eg. Polyclinics which provide subsidized rates of medical costs
- Provision of free health screening
- [Limitation] Difficulty in assessing the extent of marginal benefit and hence possibility of in determining the right amount of subsidy to be given, especially for different groups of citizens and thus equity issues
- [Limitation] Free provision of healthcare services will lead to wastage of resources as rational consumers will consume beyond the socially optimal level
- [Limitation] This method is financed through taxes and there are opportunity costs involved → Whether the resources could be used in other areas to further develop the economy
- [Limitation] Risky and may be subjected to government failure

4. Setting up of regulatory authorities in raising awareness e.g. Health Promotion Board to drive national health promotion and disease prevention programmes.

- Market failure can be caused by imperfect information – people do not take sufficient precaution to prevent
- Promoting health education through media and in schools
- [Limitation] difficult to change the mindset of people, some people may think that precaution measures are not necessary.

Conclusion

- Effectiveness of intervention in these markets depend on the severity of market failure and the appropriateness of intervention.
- If extent of market failure is small, less intervention is required, for e.g if MEB is small, perhaps some efforts to raise awareness is sufficient, as opposed to large subsidies which might unnecessarily distort the workings of the free market.
- Even in the case of public goods, effectiveness of direct provision cannot exist alone as strict regulation and monitoring are also required in order for resources to be efficiently allocated. i.e. army and police force are given sufficient funds for operation and not for resources to be unnecessarily wasted.
- Presence of good governance would prevent government failure and ensure a greater success of the implementation of the policies.

Suggested answer Essay Q4

a) Introduction

- Explain low inflation.
- State that achieving low inflation is important so as to avoid the negative consequences.
- State that achieving low inflation can also help the government to achieve other macroeconomic aims.

Development

- Explain the negative impact on the economy for not achieving low inflation
 - Falling output and employment.
 - If cost of production is high, ie, cost push inflation → AS will fall → firms reduce production thus employing less FOPs, As production falls, output level falls.
 - Falling investments
 - High rates of inflation bring about uncertainty in profits hence can cause a fall in the level of investments, including FDI. Thus dampening economic growth.
 - This is especially bad for Singapore as we rely on FDI for growth. Thus it's very imp't for Singapore achieve price stability.
 - Falling exports
 - If prices of our exports are higher than other countries, qty demanded for our exports will fall. Given the high PED, our export revenue will fall significantly.
 - This will impact Singapore adversely since Singapore relies heavily on trade for growth.
 - In addition, demand for our currency will fall too, thus causing depreciation of S\$.
 - Falling SOL
 - Rising prices will lead to fall in internal value of money, thus decreasing the purchasing power of households.
 - As purchasing power falls, amount of goods and services that can be consumed falls and thus bringing down SOL.
- Explain how low inflation, and hence price stability helps government to achieve other macroeconomic objectives.
 - With low inflation, price stability is ensured, demand for our exports will remain robust, thus maintaining the healthy BOP position.
 - With price stability, Singapore can remain attractive to foreign investors, thus bringing in FDI. This will allow Singapore to sustain the high economic growth enjoyed.
 - With high FDI, national income and employment will increase too.

Conclusion

- It is important for Singapore government to achieve price stability so as to avoid the consequences explained above.
- If price stability is achieved, other macroeconomic objectives can be achieved too.

b) **Introduction**

- State that Singapore is small and open, thus exchange rate policy works well in achieving low inflation.

Development

- Explain how exchange rate policy helps to achieve low inflation
 - Singapore adopts modest appreciation of S\$ → curbing both imported and demand-pull inflation.
- Explain the adverse impact of appreciating S\$
 - Exports becoming more expensive → exports lose competitiveness and thus dampen export earnings which is crucial to Singapore's economic growth.
- Therefore, there is also a need of supply-side policies to help to maintain the competitiveness of our exports.
- Explain how supply side policies help to maintain price stability.
 - Explain that government can provide training and retraining for the workers to improve factor mobility so as to ease the tight labour market issue. Upgrading of skills also helps to improve productivity. This can bring down cost of production, thus reducing inflation.
 - Explain that government can provide subsidies/grants to firms to encourage R&D for new methods of production or to improve and develop new products which helps to reduce COP. Thus again helping to maintain price stability.
 - Explain that government has also been spending on maintaining and building new infrastructures to increase our productive capacity and increase productivity. This will also ensure price stability.

Conclusion

- Exchange rate policy works well given the characteristics and nature of Singapore.
- However, the policy alone is not enough to ensure sustained price stability, thus there's a need of supply side policies.
- Government need to continuously review and revise our policies to ensure all macroeconomic objects can be obtained.