PJC 2016 H1 Prelim Exam Suggested Answers and Marker's Report

Question 1: Issues of Falling Oil Prices

(a) **(i)** With reference to Figure 1 and Extract 1, explain how changes in demand and supply have affected the price of oil in recent years. **[4]**

Suggested answer**:**
The equilibrium price of oil is determined by the interaction of the demand and supply of oil. The demand for oil has been low due to reasons such as weak economic activity. As oil is a derived demand where its demand is dependent on the demand of other production activity, a fall in production activity will cause a fall in demand for oil. This would cause a leftward shift of the demand curve.

On the other hand, there is a steady increase in the supply of oil as shown by Figure 1. This might be due to the reluctance of OPEC to cut down on their production. This would cause a rightward shift of the supply curve from S_0 to S_1.

Overall, due to the simultaneous fall in demand and rise in supply, the equilibrium price of oil would fall.

Other demand factors:
i) increased efficiency in production
ii) switch to usage of other fuels
iii)fall in demand of oil from the US

Other supply factors:
i) increase in oil production by the US

(a) **(ii)** With reference to Extract 1, explain the likely value of price elasticity of supply of oil. **[2]**

Suggested answer**:**
The **PES of oil is likely to be less than 1**, meaning SS is price inelastic.
Thus, even though the price of oil rise, oil suppliers need **a long time to explore and extract oil**, hence the quantity of oil supplied will rise less than proportionate.

(b) **(i)** With reference to Extract 2, explain the relationship between the change in oil price and exchange rate of Russia currency. **[3]**

Suggested answer**:**
There is a **direct relationship** between the change in oil price and exchange rate of Russia currency, i.e. when the oil price drop, the exchange rate of Russia currency also fell or depreciate.

This is because when the oil price drop, the quantity of oil exports by Russia rose less than proportionately as the demand for oil is price inelastic, thus **Russia's export revenue fell**. Hence, **the demand for Russia currency fell** causing the exchange rate to depreciate.

(b) **(ii)** Using AD/AS analysis, explain how the change in oil price has affected the economic growth of Russia. **[4]**

<u>Suggested answer</u>**:**
With the fall in oil price, the quantity demanded for Russia's oil export rose less than proportionately, hence Russia's export revenue (X) fell. As **X fell**, **AD fell** and via the **multiplier effect**, Russia's **NY fell by a larger extent** causing a fall of its economic growth leading to negative economic growth rate.

At the same time, Russia has to **raise interest rate** to prevent its exchange rate from depreciating too much. The rise in interest rate leads to a rise in cost of borrowing causing Russia's **consumption and investment to fall** which cause Russia's national income and economic growth to fall further.

(c) **(i)** Explain what determines the impact of a fuel subsidy on government expenditure. **[4]**

<u>Suggested answer</u>**:**
When fuel subsidy is given by the government to the producer, it will lower the cost of production and hence higher profitability and incentive for the producers to increase the supply of fuel. [1] The impact of a fuel subsidy on government expenditure will depend on the **price elasticity of demand for fuel**. If **demand for fuel is price elastic (PED>1)**,a fall in price of fuel will lead to a more than proportionate increase in quantity demanded for fuel, and hence resulting in a **larger amount of government expenditure on fuel subsidy** (area ABE_0P_e) as shown in Figure 1. On the other hand, if the **demand for fuel is price inelastic**, a fall in price of fuel will result in a less than proportionate increase in quantity demanded, resulting in a **smaller amount of government expenditure on fuel subsidy** (area FGE_0P_i) as shown in Figure 2.

[Diagram is not required to gain marks for this question.]

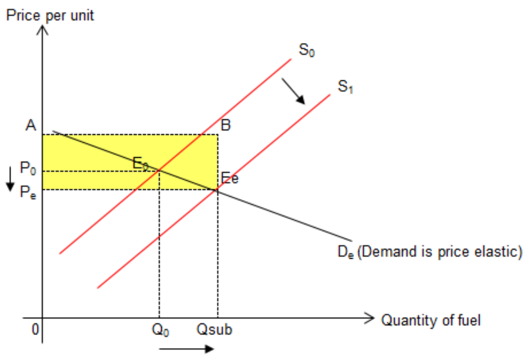


Figure 1: **When demand for fuel is price elastic, a fall in the price will result in a larger increase in government expenditure on fuel equal to area ABE_eP_e**

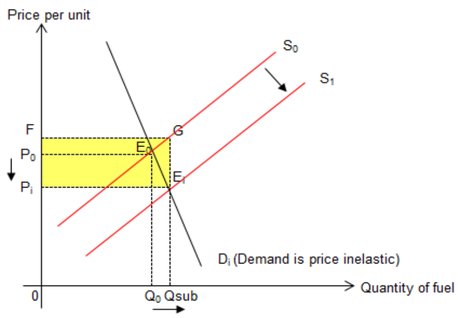


Figure 2: **When demand for fuel is price inelastic, a fall in the price will result in a smaller increase in government expenditure on fuel equal to area FGE_iP_i**

(c) **(ii)** Comment on the factors that government may consider in the removal of energy subsidies. **[5]**

<u>Suggested answer</u>**:**
The government may consider the **removal of energy subsidies in order to correct the market failure** that arises from the overconsumption of fuel due to the lower subsidized prices of fuel. In the consumption of fuel, the consumers will only take into consideration their marginal private benefits (MPB) and marginal private costs (MPC) which is the price of the subsidized fuel ignore any marginal negative externalities such as carbon emissions

and the costs it imposed on the environment and the health of the people. In addition, with the removal of energy subsidies, the **government would have more funds available for other more important areas of economic development**, reducing the opportunity cost that arises from subsidizing fuel consumption.

On the other hand, removal of energy subsidies would result in **higher energy prices** which would impact both the consumers and producers in terms of higher cost of living and the higher cost of production. This will in turn affect the competitiveness of the country exports and economic development. Hence, the government will have to take into consideration the **political, social and economic implications** when considering whether or not to remove energy subsidies.

However, **with the falling oil prices, it may be an appropriate opportunity for the government to consider reducing or removing the energy subsidies** as the effect of higher prices without subsidies would be offset by falling oil prices and the impact on the cost of living on consumers and cost of production on producers would not be sharply felt (evaluation).

(d) Low crude oil and gasoline prices have a direct effect on greenhouse gas emissions and climate change. The cheaper gasoline is, the more people drive and use fuel. **[8]**

Discuss whether falling oil price will lead to a more inefficient allocation of resources.

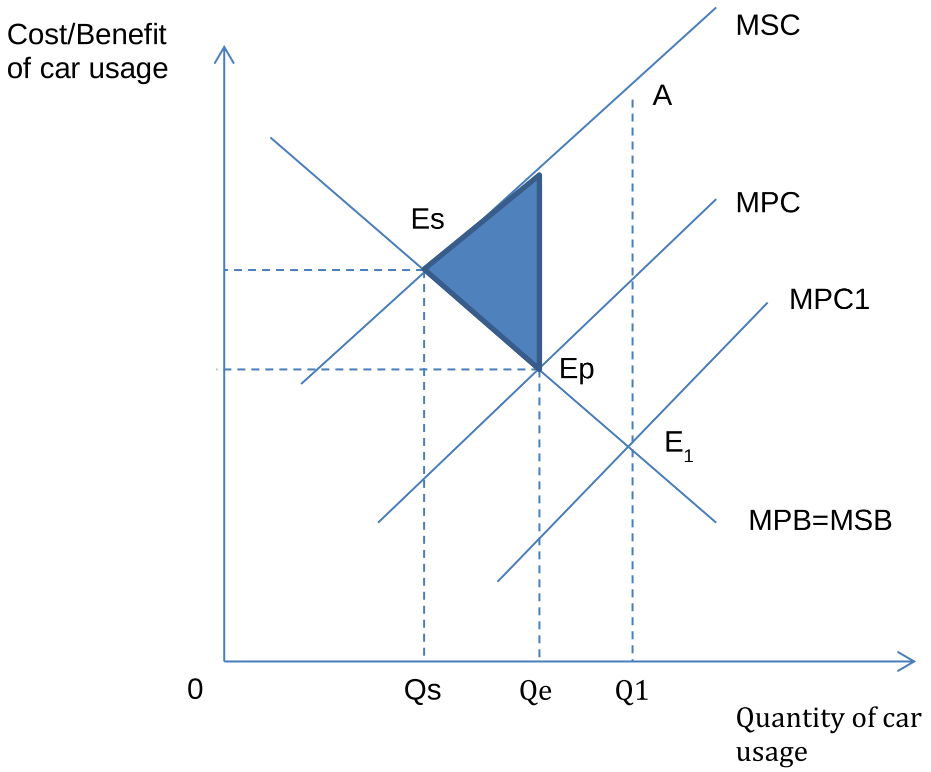
Suggested answer:
The falling oil price will lead to a more inefficient allocation of resources.

This is because as the oil price drop, car users will find it cheaper to drive their car and hence their usage of car increases. This will lead to an even **greater consumption of car leading to greater greenhouse gas emission and hence worsening the negative externality problem.** The larger over-consumption of cars will lead to an even greater welfare loss and hence a more inefficient allocation of resources. This can be explained using Figure 1 below.

When a driver uses his car, he will only consider the marginal private benefit, MPB (e.g. the convenience and time saved from the additional trip) and marginal private cost, MPC (e.g. the cost of petrol for the additional trip) and will consume his car up to Qe where MPB=MPC. However, when the driver uses his car, he ignores the external cost that could be incurred by third party, e.g. the pollution caused by his car which could cause the passer-by to incur higher medical cost as he inhale the polluted gas and fall sick. The presence of the external cost causes the marginal social cost (MSC) to diverge from the MPC. Hence, the socially optimal car usage is where MSC = Marginal Social Benefit (MSB) at Qs. The over-usage of cars in the market caused a welfare loss indicated by the shaded area.

As the price of oil drop, the MPC faced by the drivers in using the car drop to MPC1 and hence the new equilibrium amount of car used is at Q1 where MPB = MPC1. Thus, the over-consumption of cars increased to QsQ1 and there is a greater welfare loss shown by area EsE_1A, thus indicating that there is a more inefficient allocation of resources when oil price fell.

Figure 1



However, the fall in oil price will lead to a more inefficient allocation of resources **depends on whether the fall in oil price is temporary or permanent**? As mentioned in Extract 4, “a few months of low gasoline prices aren’t likely to inspire people to rush out to buy gas guzzling cars right away”. Thus, if car users believe that the fall in oil price is temporary, they will not change their consumption behavior and use their car more frequently or switch to bigger and less oil efficient cars. However, if car users believe that the fall in oil price is permanent or long term, then the effect on inefficiency of allocation of resources is greater.

Furthermore, **the fall in oil price has prompted many government to cut back on fuel subsidies. This freed up the government budget which can be reallocated to other more productive uses such as subsidizing expenditure on healthcare and education which could improve the efficient allocation of resources**. At the same time, the reduction of subsidies which improve the government's finance will enable it to lower the tax rate which will lead to greater incentive to work efforts and higher investment, both of which will increase the efficiency of the economy.

Conclusion

Hence, whether the fall in oil price will lead to a more inefficient allocation of resources **depends on whether the fall in oil price is temporary or permanent** and **how the government uses the fund that was previously used to subsidise fuel**. If the fall in oil price is temporary and the government reallocates the fuel subsidies to areas which will improve the efficiency of the economy, the fall in oil price need not lead to a more inefficient allocation of resources.

Question 2: Growth and Economic Challenges

(a) **(i)** With reference to Table 1, compare the unemployment rate between Germany and the United Kingdom from 2009 to 2012. **[2]**

Suggested answer**:**
Germany's unemployment rate has fallen from 2009 to 2012, while the United Kingdom's unemployment rate has increased from 2009 to 2012.

The United Kingdom's unemployment rate is consistently higher than Germany's unemployment rate from 2009 to 2012, except 2009.

Other possible answer:
Both Germany's and the UK's unemployment rates fell from 2011 to 2012.

(a) **(ii)** Economic growth tends to reduce unemployment rate in the economy.

Comment on whether the data in Table 1 and Table 2 support this view. **[4]**

Suggested answer**:**
Based on data from Table 1 & 2, Germany experienced positive economic growth from 2010 to 2014 and correspondingly, the unemployment rate was observed to have fallen according from 7.6% in 2009 to 5% in 2014. The same was observed for the United Kingdom from 2012 to 2014 where positive economic growth was accompanied by a fall in unemployment rate. Hence, the view above is supported.

However, in the United Kingdom from 2010 to 2011, despite experiencing positive economic growth, the unemployment rate increased from 7.6% in 2009 to 8.1% in 2011. Hence, the data do not support the above view in this instance.

(b) Extract 6 mentioned that European Central Bank plans to lower interest rate while the Bank of England plans to hold back a rise in interest rate.

Discuss the factors that a government should consider in using interest rates to manage its economy. **[8]**

Suggested answer**:**

Context 🡻 Rationale for the choice of MP	Eurozone and the United Kingdom: The European Central Bank (ECB and The Bank of England attempted to boost economic growth via a low rate of interest
Type of MP	Expansionary MP centered on i/r to boost the level of economic activity in view of the above context
How does the policy work?	A government implements expansionary MP via the use of interest rate • Lower i/r → reduces cost of borrowing → rise in consumption of big ticket item → higher C → AD rises • Lower i/r → reduces returns to savings → lower opportunity cost to consume → raise C → AD rises

	• Lower i/r → reduces cost of borrowing → given the same expected returns to investment → more investment projects are profitable → investment rises → AD rises • Lower i/r → net outflow of ST capital (Hot Money) → domestic currency tends to depreciate → export prices falls in the foreign market and imported goods become more expensive in the domestic market, if PEDx and PEDm are both more than 1 → Net X rises → expansionary impact in the economy (assume a flexible exchange rate system and no control over capital movement) • An initial change (C and I) in AD will trigger the multiplier process because a rise in investment and autonomous consumption lead to further rise in spending.
Factors that a government should consider in using interest rates to manage its economy	• Expectation of consumers and firms: impact of low interest rates on an economy depends on the economic outlook in the economy. If there is low consumer confidence and firms do not expect demand to rise shortly, low interest rates may be a necessary but not suffiicent condition to boost spending by consumers and firms. Consumers might not want to spend at the lower interest rates when their jobs are at stake in a bleak economy. As for firms, business confidence has to return before investors are willing to launch new businesses. • Possible conflict of macroeconomic aims: expansionary monetary policy via lowering of interest rates → +AD → + economic growth and reduces unemployment. However, as the level of AD rises, inflation rates tend to increase. Excessive cutting of interest rates may result higher inflation rates, a conflicit between achieving higher rates of growth and maintain low rates of inflation. Hence, this is another factor that a government should consider in using interest rates to manage its economy. In the case of the UK economy, Extract 7 mentioned that the Bank of England did not raise interest rate in view of the spare capacity in the British economy. Although the level of AD has increased, the impact on GPL is not a grave concern to the Central Bank. • Availability of data: Working with inadequate information → the government bases its decision on statistical data and forecasts about future economic conditions that are could be inaccurate. Such inaccuracies may lead to inappropriate adjustment of interest rates. Hence, several rounds of tweaking of interest rates could be required to create the desired impact on the level of AD.
Conclusion	• Choice of monetary policy, for example whether to keep interest low or raise interest rates depends on the current economic condition which determines the

	economic priority of the government. For example, in the Eurozone and the UK economy – the governments' economic priority was to achieve strong economic growth. • Amongst the factors to be considered by a government when using interest rates to manage its economy, the most important factor is expectation of consumers and firms. When business conditions are bleak, a fall in interest rates may be a necessary but definitely not a sufficient condition in bringing about a higher level of investment spending. Similarly, consumers might not want to spend at the lower interest rates when their jobs are at stake in a bleak economy. Hence, business and consumer confidence have to return first before we could see any positive impact on consumer and business spending when interest rates are kept low.

(c) **(i)** With reference to Extract 8, explain whether poor productivity may reduce the living standards in the UK economy. **[4]**

Suggested answer**:**

As stated in Extract 8, "poor productivity has been blamed for the lack of earnings growth and the squeeze on real incomes in Britain". This means that with poor productivity, employers are unwilling to increase workers' wages, thereby leading to low and stagnating wage growth. Coupled with the increase in general price level (inflation) each year, real wages might have fallen over the years. In other words, households' purchasing power falls and they now consume lower quantity and/or quality of goods and service, thereby causing a fall in living standards.

Alternative Answer: With poor productivity, that means workers in UK need to work longer hours to achieve the same level of output as workers in other G7 countries. As such, the longer work hours might induce higher stress level and lead to poorer health, thereby causing a fall in non-material SOL.

With poor productivity, that means firms need to employ more workers in order to produce the required amount of output. This could cause unemployment rate to fall and workers who were previously unemployed would now earn an income. These households would now have the purchasing power and be more willing and able to consume more goods and services, thereby increasing their living standards.

(c) **(ii)** Explain and evaluate **one** method of raising productivity growth in the UK economy. **[4]**

Suggested answer**:**
Productivity growth could be raised in the UK by encouraging firms to send their workers for training and re-training to be equipped with relevant and up-to-date skills on using the latest methods and/or technology to perform their job requirements more efficiently via provision of subsidies and other incentives from the government.

Productivity growth could be raised in the UK by encouraging firms in UK to adopt automation and greater use of machines and technology for parts of their production process to improve productivity and efficiency via provision of subsidies and other incentives from the government.

Training involves huge cost and results often are not guaranteed. Moreover, there are opportunity costs incurred as these grants could be used to provide subsidies in other areas such as healthcare and education. It could also prove challenging for the UK government to offer high subsidies for a sustained period of time in view of its high government debt.

(d) In view of the faltering recovery in the global economy, discuss whether countries should adopt trade restrictive measures. **[8]**

<u>Suggested answer</u>**:**

In view of the faltering recovery in the global economy, discuss whether countries should adopt trade restrictive measures.

In view of the faltering recovery in the global economy, aggregate demand (AD) of countries fall to a low level due to a reduction in consumption (C), investment (I) and exports (X) demand. As such, countries suffer from undesirable rates of economic growth (negative or low and slow economic growth) with rising demand-deficient unemployment. By adopting trade restrictive measures, imports become more expensive and consumers will switch to the relatively cheaper domestically produced goods, thus increasing C and AD. National income of the country will hence rise by a larger extent via the multiplier effect thus reducing demand-deficient unemployment as firms hire more workers to produce a larger real output.

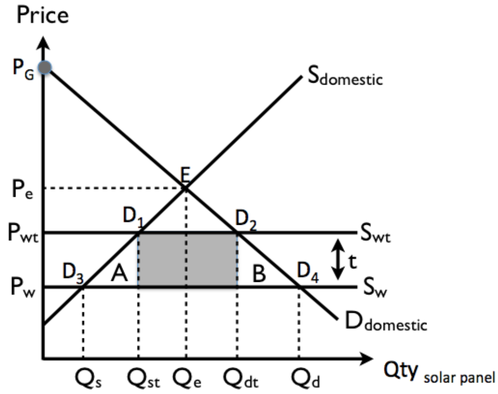
Furthermore, protectionism will reduce the marginal propensity to import (mpm) and hence increase the size of the multiplier. Thus, when the government implements expansionary monetary, for examples lowering of interest rates in the Euro zone and the UK economy, the larger size of multiplier will increase the effectiveness of expansionary monetary policy to boost economic growth. Thus, the expansionary effects of a low interest rate policy are more ‘contained’ in the domestic economy.

Thus, in this instance, protectionism can be justified in the short-term as it benefits domestic producers and employees as it prevent massive rise in unemployment when there is faltering recovery in the global economy.

What are the unintended consequences when countries decide to adopt trade restrictive measures? Are these reversible?

Tariffs imposed on imports raise prices of imports and lead to a reduction in consumer surplus and deadweight loss.

Suppose EU imposes a tariff of t per unit on China's solar panels cause the domestic price of solar panel in the Euro zone to rise from Pw to Pwt. This means that domestic firms can now charge higher prices and sell a larger quantity domestically (Q_{st} as opposed to Q_s) while the amount of imported solar panel falls from Q_sQ_d to $Q_{st}Q_{dt}$. Consumer surplus reduces from area $P_GP_wD_4$ to $P_GP_{wt}D_2$. Part of the lost in consumer surplus is transferred to producers as producer surplus (area $P_{wt}D_1D_3P_w$) while the shaded area is transferred to the government as tax revenue. Area A and Area B are deadweight loss (lost in consumer surplus that are not transferred to producer and government) which are irreversible.



Trade restrictive measures reduce imports from trading partners → trade partners' export earnings fall and hence their national income will fall by a larger extent due to the reverse multiplier effect. This will reduce their purchasing power to buy imports, thus reducing the export demand from the countries adopt trade restrictive measures. Thus, while C rises, X may fall and hence overall the AD and national income of the protecting country may not rise. This problem is worsened if the trading partners retaliate leading to trade war. Hence, protectionism may not be a viable option in view of the faltering global economic recovery.

While protectionism may help to boost domestic recovery, protectionism kills off external demand and trade relations between countries could have soured overtime (due to imposition of trade restrictive measures). Furthermore, it is difficult to re-establish trading relations after economies have recovered. Thus, trade restrictive measures have adverse impact on long term growth.

Although protectionism may offer some advantages, many of the advantages from protectionism could only be short-term rather than long-term. Countries practicing protectionism usually experience welfare loss in the form of reduced consumer choice, higher prices and reduced consumer surplus. In addition, these countries are likely to experience reduced export earnings due to retaliation from trading partners and beggar-thy-neighbour effect. Therefore, countries should avoid imposing trade restrictive measures despite the gloomy global economic outlook.

PJC 2016 H1 Prelim Exam Paper 1: Question [3]
Question: **3a) Explain why government intervenes in the market with regard to public good and merit good. [10]** **b) Discuss the view that the economic activities of the government should be restricted to the provision of public good. [15]**
<u>Introduction</u>
Government intervention in the free market is necessary when there is market failure. Market failure is deemed to have occurred where in the absence of government intervention, fails to achieve economic efficiency. For public goods, due to its characteristics of non-excludability and non-rivalry in consumption, there is non-provision of the public goods by the free market. And for merit goods as the free market does not take into accounts the positive externalities associated with the consumption of the goods, it is deemed under consumed. Hence, government intervention with regards to public and merit goods is necessary to correct the market failure and ensure a more efficient allocation of resources and hence maximizing society welfare.
Body Para 1
Public goods is not provided via the free market price mechanism due to its non-rivalry in consumption.
Public good is non-rivalry in consumption as one person's consumption of the good does not reduce the quantity available for another person. Because of this, once a public good is produced, the marginal cost of providing the good to an additional consumer is zero. For example, for a public good such as national defense, once it is provided, every consumers in the country will enjoy the same level of defense and no additional costs will be incurred for the next person in the country. This is against the theory of allocative efficiency which stated that to achieve allocative efficiency, the price of providing the last unit of the good must be equal to the marginal cost (MC) of providing the last unit of the good, that is P=MC. Since for public goods where the MC=0, it implies that the allocative efficiency price is zero, the free market would not be able to provide the goods at the allocative efficient level at zero price.
Hence, government needs to intervene in the provision of public good at zero prices in order to achieve allocative efficiency.
Body Para 2
In addition to its characteristics of non-rivalry in consumption, public goods is also non-excludable in consumption.
Due to the non-divisibility of public good, it is non-excludable in consumption where it is impossible or very difficult to exclude non-payers from consuming the goods. For example, when national defense is provided to the country as a whole, it is difficult to provide protection to those who paid income tax and exclude those who did not pay any taxes to enjoy the benefits of security. This characteristics of non-excludability give rise to a free rider problem where no one will be willing to pay for the good. Firms in the free market will not be able to charge a price for the consumption of the good and hence profit maximizing firms will not provide the goods.
Hence, non-provision of public goods by the free market necessitates government intervention in the provision of public goods.
Body Para 3
Merit goods are goods that are deemed socially desirable due to its positive externalities and is being deemed under consumed from society point of view and hence there is an inefficient allocation of resources and society welfare not being maximized.

Positive externalities are spillover benefits on third parties who are not directly involved in the consumption or production of the goods. And these positive externalities are not taken into accounts by the free market price mechanism resulting the merit goods being deemed under consumed or produced.

Education is an example of a merit good which generates positive externalities upon consumption. When education is being consumed, the consumer will only consider about its marginal private benefits (MPB) such as better job opportunities and higher income and the associated marginal private costs (MPC) such as school fees and the cost of textbooks. The consumers do not take into accounts the marginal external benefits (MEB) of being an educated and skilled labour force will help to attract foreign investment into the country, providing employment opportunities and higher income for the people of the country and boasting its economic growth. The consumers will consume up to the level where the MPB = MPC at Qm while the socially optimum level of output is where MSB = MSC at Qs where the additional benefits derived from the consumption of an additional unit of education must be equal to the additional costs incurred as shown in Figure 1. At the free market level of consumption at Qm, there is an under consumption of education as at this level of consumption, the marginal social benefit is greater than the marginal social costs, MSB > MSC and Qs > Qm. For every additional unit of education consumed, it adds more to social benefit than to social cost. There is a net benefit that is not enjoyed by society since only Qm level of education is consumed. The loss of net benefit (deadweight loss) is denoted by area AEsEm.

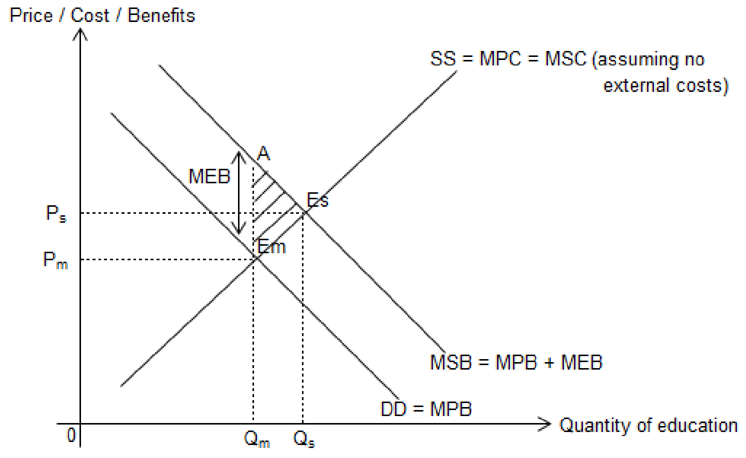


Figure 1

Hence, the presence of deadweight loss implies that there is an inefficient allocation of resources and society welfare is not maximized. This necessitates government intervention in the market for merit goods.

Conclusion

In conclusion, due to the non-provision of public goods and the under consumption of merit goods in the free market, it necessitates the government intervention in order to achieve a more efficient allocation of resources to maximize society's welfare.

Question:

3a) Explain why government intervenes in the market with regard to public good and merit good. [10]

b) Discuss the view that the economic activities of the government should be restricted to the provision of public good. [15]

<u>Introduction</u>

The main aim of the government is to maximize society welfare. And this may be achieved at a microeconomic level via an efficient allocation of resources in producing an optimal amount of goods and services and at the macroeconomic level, the four basic macroeconomic aims of the government of sustained economic growth, low inflation, low unemployment and a favourable balance of payment. To maximize society welfare, economic activities of the government should not only be restricted to the provision of public goods. It should include the provision of merit goods and the adoption of economic policies to achieve both the microeconomic and macroeconomic aims of the economy.

Body Para 1

Due to the indivisibility nature of public goods which gave rise to its characteristics of non-excludability and non-rivalry in consumption resulting in the non-provision and missing market for public goods, it is essential that the government should intervene in the market for the provision of public goods.

With the provision of the public goods, the government can ensure that sufficient resources are allocated for the production of public goods, achieving allocative efficiency and maximizing society welfare

Public goods such as national defense, police force, street lightings are essential goods for the benefits of consumers but also for the development of the economy. With the provision of national defense and a capable police force, for example, will ensure the security of the country and safety of the environment, this will help to attract investment, creating employment opportunities and boosting economic growth.

On the other hand, when the government undertook the provision of public goods, the increase in government spending will also help to create employment opportunities and boosts economic growth.

Hence, due to the non-provision of public goods by the free market and the essential nature of public goods for the development of the economy, government intervention in the provision of public goods is necessary.

Body Para 2

Government economic activities should not be restricted solely to correcting the market failure associated with the provision of public goods but also other goods such as merit and demerit goods.

The market for merit goods failed due to the presence of positive externalities. And as the free market price mechanism failed to take into the accounts of the positive externalities, resulting in the marginal social benefits (MSB) exceeding the marginal social costs (MSC) at the free market level of consumption (MSB >MSB), merit goods are deemed to be under consumed from society point of view. Hence, it is necessary for the government to intervene in the provision of merit goods to ensure that optimal amount of resources are allocated for the provision and consumption of merit goods. The government may intervene by providing subsidies to consumers or producers to encourage the consumption or production of the merit goods such as education, healthcare services.

On the other hand, the government should also intervene in the free market to reduce the consumption or production of demerit goods which is deemed over consumed due to the presence of negative externalities which are not taken into accounts by the free market price mechanism. The government may intervene in the market for demerit good by imposing a tax or passing regulations to discourage or reduce the consumption or production of demerit goods such as smoking, gambling or binge drinking.

Hence, government intervention in the markets for merit and demerit goods is also necessary to ensure a more efficient allocation of resources and an optimal amount of the goods and services are being produced and consumed.

Body Para 3

Government should also intervene to correct market failure resulting from income inequality.

In the free market without government intervention, income inequality may result in some goods and services not being allocated to the people who need them more. This is because the free market only responds to those who have the ability and willingness to pay which constitute the effective demand. The free market will not response to those with insufficient economic votes. But as the ability to pay does not reflect the needs, individuals who need some goods and services but do not have the ability to pay have to go without the goods and services. The lower income earners may not be able to afford basic necessities such as food, clean water, shelter, education, and healthcare. Inequity in income and hence purchasing power will thus result in social costs incurred by society as the potential and talents of these people may not be fully utilized. In addition, it may also lead to the rise in social problems and unrest due to the rise in crime rate. And in order to ensure a more equitable distribution of income, the government may adopt a progressive tax system where the higher income earners will pay a higher amount of tax than the lower income earners. This enabled a transfer of income from the higher income groups to the lower income groups in the form of subsidized goods and services provided by the government. It will also result in a more equitable distribution of resources and maximizing society welfare as a whole.

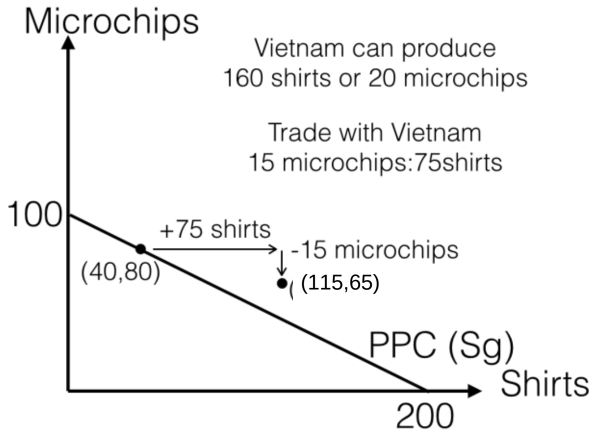
Thus, as income inequity may lead to an undesirable allocation of goods and services to those who are able to pay and not to those who need them. It is socially undesirable which may restrict the potential growth of the economy, it necessitates the intervention of the government to ensure a more equitable distribution of income and resources among the people.

Body Para 4

Another reason for government intervention other than the provision of public goods is to main economic stability.

The macroeconomic aims of the government is to achieve sustained economic growth, low inflation rate or price stability, low unemployment and a favourable balance of payment. Leaving the economy completely to the free market forces may result in period of recession with high unemployment and falling output while other periods with rising prices. Hence, government intervention such as monetary, fiscal or supply side policies may be necessary to lift the economy out of recessions, cool down an overheated economy, or improve the competitiveness of the economy. For example, when there us a fall in export due to the lack of competitiveness of the domestic goods, resulting in unutilized resources such as unemployed workers, the government

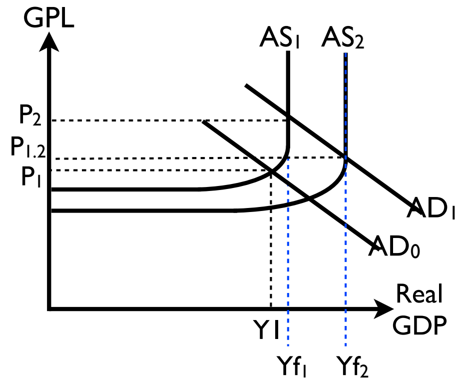
may intervene by increasing government spending on training and education to upgrade the skills of the labour force, increasing the productivity and improving the competitiveness of the economy.
Hence, in striving to achieve an efficient allocation of resources and the macroeconomic aims for the economy, government intervention may be necessary in other areas may be necessary other than the provision of public goods.
Conclusion
In conclusion, the economic activities of the government should not solely be limited to the provision of public goods as the aim to maximize society welfare can only achieved via government intervention in various aspects such as adopting policies to ensure a more equitable distribution of resources and ensuring the macroeconomic aims of the government is achieved. Nevertheless, provision of public goods remain an important activity given their characteristics. As far as possible, government will want to broaden its scope of activities to achieve both microeconomic and macroeconomic aims. However, this may depends on the health of its reserves. In the event that it has limited reserves, government may need to prioritise its activities based on cost-benefit analysis. In addition, the form and extent of government intervention will depend on the needs of the economy and will vary from economy to economy. For example, certain economies may place great emphasis on building its provision of merit goods such as education or healthcare with the government playing a very significant role so as to increase productivity and boost growth as well. However, it should be noted that while may be necessary for government intervention, government intervention does not guarantee a more efficient allocation of resources and maximization of society's welfare. As government is also susceptible to government failure, the outcome of government intervention may be worse than before government intervention.

PJC 2016 H2 Prelim Exam Paper 2: Question 4
Question: **Economic globalisation impacts on trade in goods and services and foreign direct investment.** a) Explain the trend towards globalisation. b) Discuss the view that for Singapore the problems of increasing globalisation have outweighed the benefits.
Introduction
Globalization is a process of deeper economic integration between countries through increased trade (imports and exports) and investment (foreign direct investment) flows. The trend towards globalization is due to the theory of comparative advantage (CA), development in technology (lower transport and communication costs) and revolution of the supply chain.
Body Para 1
The trend towards globalization is due to the theory of CA.
The theory of CA states that all countries can benefit from trade if they specialise in producing goods where they have a lower opportunity cost. Assume Singapore has resources to produce 200 shirts OR 100 microchips, and factors of production are perfectly mobile, if Singapore produces 40 shirts and 80 microchips, and trades with Vietnam who can produce 160 shirts OR 20 microchips, trading at a mutually beneficial exchange ratio to get 75 shirts for 15 microchips, Singapore can consume 115 shirts and 65 microchips, beyond her PPC.  Singapore specializes in microchips (her CA) while Vietnam specializes in producing shirts (Vietnam has CA). Hence this shows that trade benefits all countries allowing them to consume beyond their PPC. World output is higher with specialization boosting global national income and economic growth. The desire to gain these benefits has pushed countries to increase trade in exports and imports
Body Para 2
Improvements in technology has reduced transport costs and this has boosted trade and capital flows
With the development of technology, bigger and faster ships and planes can carry larger loads over longer distances with reduced costs. The cost of moving goods around the world has fallen greatly because of containerization and the increasing size of ships. With lower transport costs, it would mean that consumers find it cheaper to import more goods than buy it locally, hence **boosting trade**. Furthermore, lower transport costs meant that firms are more willing to shift production into far away countries to reap the benefits of lower cost of production (based on the CA of that country) and earn higher profits as they can now produce cheaply and ship it back to their home markets and sell it at more competitive prices. Thus **investment flows** have risen over time.

Body Para 3
Improvements in technology has reduced communication costs via the internet.
The internet has made the world more interconnected and increased the information available for firms and consumers. Firms can better understand the risks and opportunities in other countries and firms are more willing to shift production overseas to enjoy lower costs and higher revenues from various markets overseas, boosting investment flows The internet facilitates communication and agreements on trade contracts can be settled more quickly, even allowing consumers to order direct from international suppliers via eBay, Amazon or direct from brands like Apple via the online Apple store. Secure electronic payments via paypal have boosted cross border transactions and have led to an increase in imports and exports.
Conclusion
Hence, the theory of CA as well as development of technology which reduced transport and communication costs have led to the trend towards globalization.

b) Discuss the view that for Singapore the problems of increasing globalisation have outweighed the benefits. **[15]**
<u>Introduction</u>
Increasing globalisation has indeed benefitted many countries especially for a small country without resources like Singapore. Benefits include creation of jobs, improvement in the standard of living, lower average production cost due to increase in competition, enjoyment of more variety of goods, access to greater markets etc. However, this has also brought other problems to the Singapore economy like structural unemployment, fall in export earnings due to slowing down in world economic growth and so on. Whether the problems of increasing globalisation have outweighed the benefits will depend on how effective the policies that the government has implemented to mitigate these problems.
Body Para 1
What is the most important point?
Rising trade and investment flows has boosted Singapore's economic growth.
With political stability, efficiency in legislation and fair IP and business laws, along with a well-developed and efficient communication and transportation infrastructure, Singapore has attracted tremendous inflows of FDI from many parts of the world, especially in the industries seeking to tap on the skilled workforce that Singapore can provide such as the pharmaceutical, chemical and finance industries. In addition, with a competitive workforce producing quality high skilled exports, our export earnings have exceeded import expenditure. Overall, Singapore has had a surplus in current and capital account of her balance of payments, showing that net investment and net exports have been positive.

In the short run, I and (X-M) rises causing AD (AD_0 to AD_1) to rise and boost real GDP. In the long run, FDI brings in new technology, skills transfers and a buildup of capital stock, boosting the quality and quantity of capital and labour, increasing productive capacity (Y_{f1} to Y_{f2}), shifting the AS curve (AS_1 to AS_2). These bring sustained growth, as the initial Y_1 rises to Y_{f1} then Y_{f2} over time.



Body Para 2

Firms can enjoy economies of scale (EOS) from large scale production for domestic and foreign markets and consumers enjoy more variety of goods

EOS reduces average costs of production which makes exports cheaper and makes the product cheaper for locals too.
There is also greater access to imported consumer goods, resources, and intermediate products due to rising intra-industry trade, consumers are able to enjoy a greater variety of products resulting in higher consumer welfare. According to the theory of CA, Singapore benefits by being able to consum beyond the PPC.

Body Para 3

However, increasing globalisation has also led to increased structural unemployment in Singapore.

Competition from cheap imports have driven some manufacturing industries out of business, causing them to shift production to China and has caused these sectors to shut down and retrench low skilled workers. Inflows of FDI in high skilled sectors have increased the demand for high skilled workers but many retrenched low skilled workers do not have the ability to take up these jobs. This has increased structural unemployment and worsened income inequality in Singapore.

Body Para 4

Increasing globalisation also causes Singapore to be more vulnerable to global economic fluctuations.

In 2008, the Singapore economy was affected by the decline in global trade and FDI as a result of the financial crisis in the US. Recession in US caused falling incomes and weak consumer and business expectations, the US consumers falling purchasing power caused them to buy less of Singapore's Exports, and FDI flows from US into Singapore also fell, causing Singapore's AD to fall rapidly, resulting in a fall in real GDP and negative economic growth, reducing the demand for labour and increasing cyclical unemployment.

Body Para 5

The Singapore government has been able to implement effective policies to reduce the negative impacts of globalization.

Supply side policies like the jobs credit scheme and retraining grants helped keep structural unemployment low, because workers could train to gain new skills to take up employment in the new high skilled industries that had a strong demand for workers with rising FDI inflows. Also, Singapore has expanded her free trade agreement network to diversify her exports to other countries in ASEAN and emerging economies like Brazil, Russia, India and China. This was to reduce her reliance on US and Europe, so that external shocks to any one country would not have such a large impact on Singapore.
Conclusion
Thus, because Singapore has had the reserves and strong leadership to implement effective policies to reduce the negative effects of globalization, and her small domestic sector means that she has to rely on exports for growth, she has largely enjoyed most of the benefits from globalization with minimal negative impacts. Thus, the problems of increasing globalization for Singapore have not outweighed the benefits.