

You are reminded of the need for good English and clear presentation in your answers.

## Section A

Answer **all** questions in this section.

### Question 1 The oil market

**Figure 1: Crude oil prices (in US\$ per barrel) from 2011 to 2015**



Source: NASDAQ, July 2015

#### **Extract 1: Economy speeds up, pollution stalls**

Global emissions of carbon dioxide in 2014 was comparable to that in 2013, according to the International Energy Association, marking the first time in four decades that economic growth has not resulted in more emission of greenhouse gases.

The halt in emissions growth reflected changing patterns of energy consumption in China, the world's biggest polluter, as it now uses less oil. Instead, China is increasing its use of renewable sources, such as hydropower, solar and wind to generate electricity.

Source: CNN, 13 March 2015

#### **Extract 2: OPEC sees oil price below \$100 a barrel in the next decade**

OPEC has been grappling with how to respond to a historic price crash caused in part by a surge in American supplies, thanks to hydraulic fracturing of shale formations deep underground. The 41 fracking companies operating in the US add about 1 million barrels of oil a day in 2014.

Normally, the cartel cuts its own production to reduce supplies, and thereby pump up prices, in times of market turbulence, but last year the group decided that would not work. Instead, some OPEC nations, notably Saudi Arabia, have flooded the market with more crude and cut prices in hopes of keeping customers.

Source: The Wall Street Journal, 12 May 2015

**Extract 3: Impact of fuel prices on US**

The drop in fuel prices has helped consumers in developed countries such as the U.S. heading into the holiday shopping season. Lower prices at the pump and on heating bills give consumers more money for discretionary items such as restaurant meals, electronics and haircuts. This has helped lift consumer confidence to a seven-year high and has led economists to predict a more dramatic spending impact ahead.

Falling fuel prices also reduce production and shipping costs for an array of U.S. manufacturers, farmers and businesses.

Source: The Wall Street Journal, 27 November 2014

**Extract 4: The economic case for scrapping fossil-fuel subsidies is getting stronger**

Governments with high fuel subsidies are more exposed to external shocks if they borrow to finance their deficits. Holding down prices causes their budget deficits to explode, making them vulnerable to rising global interest rates. Cutting subsidies now would leave more money for growth-boosting policies, such as infrastructure investment.

Subsidy cuts are widely associated with higher inflation: energy costs rise. But in a world of falling inflation the risks this poses are lower. The IMF forecasts that subsidy cuts in various countries will have a small impact on their respective inflation rates.

Source: The Economist, 11 January 2014

**Extract 5: A good scrap- as Jokowi abandons wasteful fuel subsidies, fiscal prospects brighten**

Indonesia's president, Joko Widodo, began the new year knowing that he will now have trillions of fresh rupiah to spend that his predecessors have lacked. Having trimmed petrol subsidies in November, Mr Joko, who is universally known as Jokowi, scrapped them entirely from January 1st.

The president's broad aims are already clear: he wants to boost spending on health, education and infrastructure, and he wants to bring down the budget deficit from about 3% to under 2% of GDP. The president has also been clear about his desire to see Indonesia return to growth of 7% a year, a rate that it has not reached since the mid-1990s. The World Bank forecasts Indonesia's economic growth of 5.2% this year. In the longer term, Indonesia's prospects are brighter. Better infrastructure should lower transport costs and attract more business investment—including from foreigners. With a healthier and better-educated workforce, Indonesia would rely less on extractive industries. Instead, more people could find work in services and higher-value manufacturing—semiconductors and smartphones rather than T-shirts and trainers. And having got fuel subsidies out of the way, Jokowi can move on to thornier problems of streamlining regulatory tools and government bureaucracy. His year has got off to a good start.

Source: The Economist, 10 January 2015

**Extract 6: US and their fight against carbon emissions**

The use of tradable permits to cut carbon emissions was based on a simple economic insight. If firms facing high costs to cut emissions could buy allowances to pollute from those who could cut emissions at lower costs, reducing overall pollution

would be much cheaper. This means that instead of determining the exact pollution quota for each of the millions of households, factories, farms, cars, trucks etc. – all of whom face very different costs of reducing pollution – the tradable permit system lets the market do the job. This means it is also more efficient.

However, as tradable permits are in essence a hybrid of a regulation and a tax, it could still suffer from the same limitations of some of these individual measures.

Robert N. Stavins, who heads the Harvard Environmental Economics Program, points out, that using regulation to set quotas of carbon emissions to limit greenhouse gas emissions is an implausibly complex task. Any government faces a similarly complex task in determining the cap for tradable permits.

A carbon tax, while effective, is almost always too low to encourage sufficient reductions in carbon emissions. The effective tax on carbon among the world's 41 biggest polluting nations, which account for some 84 percent of global carbon emissions from energy, amounted to about \$16.60 per metric ton of CO<sub>2</sub>, on average. That's about \$20 less than the estimate of carbon's external costs. These external costs include falling average life expectancy; in countries like China, its dirty air has driven foreign executives and companies out of the country which negatively affects the economy. Similarly for the tradable permit system, the permits must be trading at an appropriate price that reflects the costs of pollution. A tradable permit system with too many permits will result in permits trading at too low a price.

Source: The New York Times, 30 June 2015

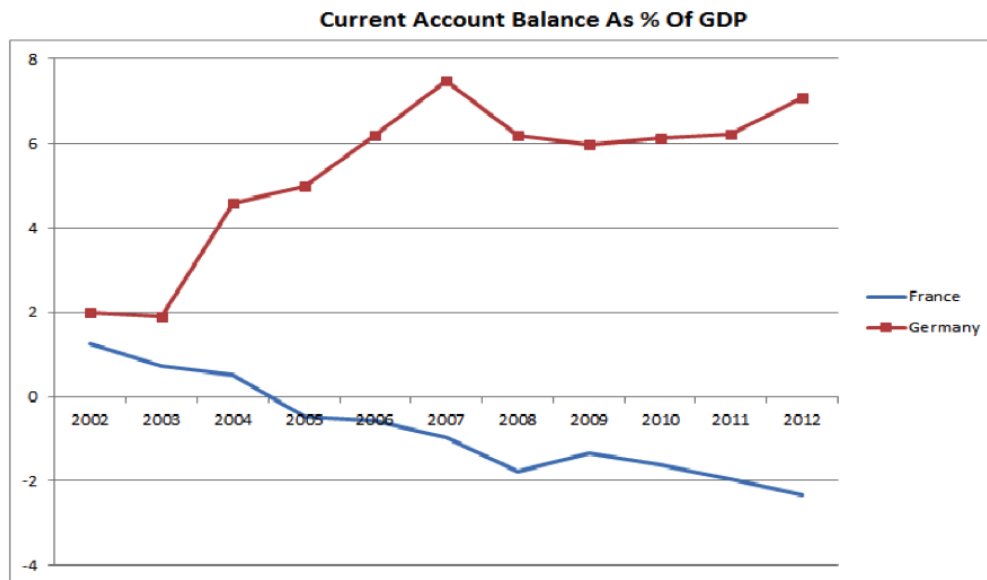
### Questions:

- (a) With the help of a diagram, account for the overall change in crude oil prices between 2014 and 2015 with one demand factor and one supply factor. [6]
- (b) Explain the impact of the change in fuel prices on the US economy in extract 3. [4]
- (c) Comment on the possible effects of removing fuel subsidies on Indonesia's short run and long run growth. [8]
- (d) Using relevant data, explain how the use of oil generates negative externalities. [4]
- (e) Discuss the effectiveness of tradable permits in reducing the level of carbon emissions. [8]

**[Total: 30 marks]**

## Question 2 Troubles in France

**Figure 2: Trade balances of France and Germany**



Source: Trading Economics

**Table 1: France's key macroeconomic indicators**

Key indicators	2008	2009	2010	2011	2012	2013e <sup>1</sup>
GDP (% real change pa <sup>2</sup> )	-0.2	-3.1	1.6	1.7	0.0	-0.2
Private consumption (% real change pa)	0.2	0.2	1.4	0.2	-0.1	-0.2
Consumer prices (average % change pa)	3.2	0.1	1.7	2.3	2.2	0.9
Recorded unemployment (%)	7.4	9.2	9.3	9.2	9.9	10.6
Budget balance (% of GDP)	-3.3	-7.6	-7.1	-5.2	-4.8	-4.0
Public debt (% of GDP)	68	79	82	86	90	93

Source: Economic Intelligence Unit

### Extract 7: France's battered economy

On April 16th the IMF issued a grim reminder by forecasting that France will join Spain, Italy, Greece and Portugal in recession in 2013. The worsening outlook leaves the French government not only unable to stick to its promises of budget deficit reduction, but facing an internal political rebellion over how to manage its public finances.

Household consumption fell in both January and February. In March the INSEE business-confidence index dropped to nearly ten points below its level of a year ago. Struggling with the lowest profit margins in the euro area, many firms are putting investment on hold. A persistent deterioration of competitiveness in France has led

<sup>1</sup> e: estimated

<sup>2</sup> pa: per annum

to a greater loss of world export share over the past ten years than in Germany, Italy or Spain, particularly in manufacturing.

Three-quarters of the structural efforts to reduce the budget deficit this year depends on tax rises. However, France's overall tax burden is already the highest in the Eurozone and is set to rise yet again, to some 46.5% of GDP next year. Thus, the French government has promised that there will be no new taxes in 2014 beyond another Value-Added Tax increase.

This meant that to reduce the budget deficit, the government would have to cut its spending through a pension reform and cutting family benefits for the richest 15% of French households. This would not go well with a minority in the government who fear this will cause the economy to contract.

Source: Adapted from The Economist, 20 Apr 2013

### **Extract 8: President Hollande converts, proposes “austerity” and to boost growth in France**

The policy battle of the last six years has been over how governments should respond to the recession that swept most of the globe, the slow growth that followed, and high unemployment. One camp argued for immediate large increases in government spending financed by borrowing, followed early in the recovery by higher taxes on the rich. The other camp recommends decreased government spending paired with tax cut measures, or more commonly known as austerity measures. The first camp was more popular initially, with governments around the world first reaching record budget deficits and then passing tax increases on high earners. However, in a major sea change on the policy battlefield this week, President Hollande of France announced a conversion to the second camp.

It is however worth noting that the French version of austerity measures is slightly different from the norm. The government is focusing mainly on cutting government spending but there is no room to raise taxes as they are already very high. Instead, President Hollande announced tax cuts on businesses to complement cuts in government spending. This is particularly significant to economic policy makers around the world as France has the highest ratio of government spending to GDP of any developed economy.

In opposition to those pushing for more government spending as the solution, President Hollande said that only private investments could create jobs and revive growth. In particular, President Hollande is proposing to lower the payroll taxes that businesses pay for hiring each worker. This is not only a big win for businesses, but also recognition that making labour less expensive will encourage business to use more of it.

The results of the few countries in Europe that have tried cutting government spending have been quite positive. As of 2013, Bulgaria, Latvia, Lithuania, Hungary, Poland, and Romania have all cut government spending and seen their economies grow faster than the average for the European Union.

Source: Adapted from Forbes, 18 Jan 2014

**Extract 9: France resorting to protectionism**

When an international credit agency announced that over 62,000 companies in France would face bankruptcy in 2013, the French government set out to overcome a temporary surge in unemployment in France with a concerted effort of national industrialisation through various policy interventions. The government has pledged billions of euros to fund struggling national firms, a thinly-veiled attempt at protectionism. Yet, are such well-intentioned policies preserving France's future competitiveness within the European market?

The European competition commission Mr Almunia critiqued that "the European economy cannot be invigorated through protectionism...as Europe will not find its place in globalisation by launching a subsidy race with the rest of the world." Many other critics have similarly cited the French policies as the cause of, not the cure for, the French economy heading towards little or no economic growth in the immediate future. Unsurprisingly, France's trade deficit continues to grow, as the result of excessively bureaucratic labour policies and sky-high payroll taxes which keep importers hesitant to the purchase of French national products. Protectionism is not only contributing to stagnating economic growth, but also helping to cultivate dangerous conditions that can give rise to regional European and even global economic recession.

And how is the French government paying for the industrial subsidisation? In one of the bids to increase tax revenue, the French government had increased the tax rate on top earners to 75 per cent. Some top earners have left France as a result; the sky-high payroll taxes will also lead to an increase in goods and services, including exports.

Source: Adapted from [www.parisglobalist.org](http://www.parisglobalist.org), 13 May 2014

**Questions:**

- (a) (i) Using Figure 2, compare the current account balance as percentage of GDP of France with that of Germany, from 2005 to 2012. [2]
- (ii) Account for France's current account balance from 2005 to 2012. [2]
- (b) What conclusion would you draw from Figure 2 and Table 1 about France's economic performance from 2008-2012? [3]
- (c) Identify and explain the cause of rising unemployment in France. [3]
- (d) Explain why the French government is unable to cut the budget deficit. [6]
- (e) Explain how "France's version of austerity measures" is expected to impact the French economy. [6]
- (f) With reference to the data where appropriate, assess whether the French government should adopt protectionism to deal with its macroeconomic problems. [8]

**[Total: 30 marks]**

**Section B**

Answer **one** question from this section.

3. (a) Explain how the price mechanism allocates scarce resources among competing needs in a free market. [10]

- (b) Economic problems are often complex. As a result, the government may sometimes use a policy mixture where more than one policy is used, to tackle an economic problem more effectively.

With the use of a merit good example, explain and evaluate a policy mixture that a government might use to bring about a more efficient allocation of resources. [15]

4. The increasing trend of globalisation involves more world trade and more movement of capital and labour, creating opportunities for Singaporean workers and firms.

- (a) Explain the gains from globalisation for Singapore. [10]

- (b) However, not all workers will benefit as increasing globalisation could potentially lead to increasing unemployment as well.

Evaluate the supply-side policies used in response to the above. [15]

END OF PAPER



**Suggested answers to:**  
**Q1- The oil market**

**(a) With the help of a diagram, account for the overall change in crude oil prices between 2014 and 2015 with one demand factor and one supply factor. [6]**

Well labelled diagram with appropriate shifts - 1m  
Identify fall in crude oil prices in given time period - 1m  
Explain 1 demand factor- 2m  
Explain 1 supply factor- 2m

Demand factors: (to explain fall in demand for crude oil)

Either:

1) Changing patterns of energy consumption (extract 1) - taste and preferences due to pollution concerns

Supply factors: (to explain increase in supply of crude oil) – Explain 1

1) OPEC producers increasing supply to retain market share (extract 2)

2) Increase in size of industry with the entrance of American fracking companies (extract 2)

Incorrect- removal of fuel subsidies (extract 4): fuel is not oil. removal of fuel subsidies will reduce supply of fuel, not necessarily supply of oil.

**Examiners' Comments for CSQ1(a):**

Most candidates demonstrated sound understanding and application of demand-supply analysis to explain changes in prices in a free market, i.e. accurately and well-explained diagram to explain how demand and supply changes will lead to adjustment to new equilibrium.

Stronger candidates extended the analysis to include extent of shifts in demand vs supply and some also applied PED and PES in their analysis.

**Question requirement:**

a) However, while the above was done well, it is less clear whether candidates understood what is meant when the command words are 'account for'. 'Account for' requires not only identification or stating of the factor(s) or reason(s) but also requires economic explanation of the reason(s). E.g. many candidates did not explain the reason for the change in pattern of energy consumption in China.

**(b) Explain the impact of the change in fuel prices on the US economy in Extract 3. [4]**

There are two main approaches to this question.

The first, more likely approach, is to talk about the macroeconomy using AD/AS analysis:

*Impact on AD [Up to 2m]*

- The fall in fuel prices, given price inelastic demand for fuel (necessity, few substitutes), means a less than proportionate increase in quantity demanded for fuel. Therefore the total expenditure on fuel will fall. Assuming that disposable income remains constant that means a greater proportion of disposable income is now

available for consumption of other goods and services. This would lead to an overall increase in (autonomous) consumption. [1m] Since consumption (C) is a component of aggregate demand (AD), therefore AD will increase, ceteris paribus. [1m]

OR

- The rise in consumer confidence could lead to a subsequent rise in business confidence, where firms will expect higher consumption and therefore greater revenue earned. Assuming costs remain unchanged, this leads to an increase in profits (or expected rate of return on investment). Investment therefore increases. [1m] Since investment (I) is a component of AD, therefore AD will increase, ceteris paribus. [1m]

OR

- The fall in fuel prices means a fall in cost of production for most firms that use fuel as a factor input. [1m] This lowers the price of domestically-produced goods and services should firms choose to pass on their lower costs to consumers. Should the prices of exports fall in domestic currency, it could improve price competitiveness of exports assuming that exchange rate remains unchanged. Therefore the demand for exports in domestic currency could increase. [1m] Since export (X) is a component of A, therefore AD will increase, ceteris paribus. [1m]

*Impact on AS [Up to 2m]*

- The fall in fuel prices would lead to a fall in cost of production for most firms that use fuel as a factor input. [1m] This will lower the unit cost of production, increasing the (short-run) aggregate supply as firms can now produce the same level of output at a lower unit cost of production. [1m]

Note: answers that use “fall in cost of production” to explain for impact on AD and AS can only be credited once for this analysis.

*Overall impact on economy when AD and/or AS changes [Up to 2m]*

- When AD and (SR)AS increases, there is increase in real national output via multiplier effect, increase in employment level. Increase in AD causes GPL to rise but the increase in AS will reduce inflationary pressures; therefore the overall impact on GPL is uncertain / depends on the relative shift of AD and AS. Balance of payments could also improve if X and/or FDI increases, ceteris paribus. [1m each for any macroeconomic indicator mentioned; however changes in real output and cyclical employment are treated as 1 point only since the analysis required is the same]

Note: AD/AS diagram not required to score full credit

The second approach, is to explain the impact on consumers and producers:

*Impact on consumers [Up to 2m]*

- The fall in fuel prices, given price inelastic demand for fuel (necessity, few substitutes), means a less than proportionate increase in quantity demanded for fuel. Therefore the total expenditure on fuel will fall. Assuming that disposable income remains constant that means a greater proportion of disposable income is now available for consumption of other goods and services. This increases the purchasing power of consumers [1m], allowing them to consumer more goods and services, therefore increasing consumer welfare / material standard of living. [1m]

*Impact on producers [Up to 2m]*

- The rise in consumer confidence could lead to a subsequent rise in business

confidence, where firms will expect higher consumption and therefore greater revenue earned. At the same time, the fall in fuel prices would lead to a fall in cost of production for most firms that use fuel as a factor input. [1m]

- Combined, the a likely increase in revenue and a fall in cost of production will lead to an increase in profits. [1m]

### **Examiners' Comments for CSQ1(b):**

Overall, majority of candidates scored 3 or 4 marks (out of 4) for this question, because these answers showed clear attempts to analyse at least two ways the change (fall) in fuel prices would impact the US economy.

**TAKE NOTE:** Answers that were awarded 4 out of 4 marks may not be error-free. So please read on! These small errors could be amplified if you were attempting a AD/AS question that carries more weight (e.g. 6/8m case study, or even in the essay).

As predicted, the word “economy” in the question prompted the large majority of candidates to approach the question using the AD/AS framework. The AD analysis was usually done well; on the other hand, the AS analysis did contain some errors.

By and large, most candidates who used the AD/AS framework would have scored 2 marks for explaining the impact on AD. Some candidates, in fact, explained more than one possible way for AD to be affected. For a 4m question, multiple explanations for why AD would increase would be limited in scope, and unlikely to score 4m by itself.

### **Content:**

a) The following comments are common mistakes for candidates using the AD/AS approach, focusing on impact on AD first:

- i. When explaining how a fall in fuel prices would lead to an increase in consumption, more than half the candidates made a reference to an increase in disposable income. This was wrong since, if we assume that there are no changes to income and tax rates, then disposable income must have remained constant. The correct phrasing, which only a small group of candidates managed to use, is, “as fuel prices fall, a lower proportion of disposable income is spent on fuel, which means consumers can spend more on other goods and services, thereby increasing consumption...” → Of course, an easier way out of this mess, is to avoid using the term “disposable income” altogether and just use “purchasing power increased”.
- ii. Many candidates who used the export argument made incomplete analysis, jumping from “fuel prices fell” straight to “export demand will increase”. Candidates **MUST** explain how “fuel prices fell” would cause a fall in price of exports first.

b) The following comments are common mistakes for candidates using the AD/AS approach, focusing on impact on AS next:

- i. A significant minority wrongly linked a fall in fuel prices, i.e. a fall in price of factor inputs, to an increase in productive capacity. Productive capacity (or LRAS, full employment level) can only increase when there is an increase in quantity of factor inputs and/or improvement in quality of factor inputs.

Some may consider an improvement in technology as a separate third determinant of a shift in productive capacity, but this can usually be accounted for by the earlier two factors. A fall in price of factor inputs, in short, does not lead to any of these two (or three) determinants of productive capacity.

- ii. A small minority mistook the “reduce(d) production and shipping costs” (Extract 3) to mean a fall in production. Please read carefully. The sentence, if lengthened, would have read “...falling fuel prices also reduce production (costs) and shipping costs...” Mis-reads can happen during examination conditions, but these mistakes can be costly.
- iii. A minority wrongly stated that a fall in cost of production would lead to a decrease in (short-run) aggregate supply. The correct analysis is fall in COP → increase in SRAS.

- c) The following comments are common mistakes for candidates using the AD/AS approach, focusing on how changes in AD and/or AS can impact the economy:
- i. A significant minority did not pick out that when AD increases, GPL would increase; on the other hand when AS increases, GPL would fall.
  - ii. A minority made directional references when no diagram was presented. For example, when no diagram is presented, it makes little sense to state “AD shifts to the right” or “SRAS shifts down”. It would be better to state “AD increases” and “SRAS increases” respectively.

**(c) Comment on the possible effects of removing fuel subsidies on Indonesia’s short run and long run growth. [8]**

**Impact on short run growth:**

• **SRAS**

Cost of production increases, leading to fall in SRAS. Results in inflation.

Evidence: Extract 4 “Subsidy cuts are widely associated with higher inflation: energy costs rise.”

With inflation, there may be uncertainty in profits and hence fall in new investments.

Also, cost-push inflation may lead to fall in employment and real national output. (The amount of real output that the existing level of total demand will buy will be reduced. That is, a given level of total spending will only be capable of buying a smaller real output when cost-push pressures raise the price level.)

• **AD**

AD may fall due to fall in investments resulting from inflation, or it may fall due to decreased government spending with the removal of subsidies. Fall in AD leads to accumulation of stocks and firms cutting down on production. There will be a fall in real national income via multiplier effect.

Therefore, detrimental to short run growth. There will likely be fall in actual growth.

**Impact on long run growth:**

• **LRAS**

LRAS increases. Increase quality and quantity of resources, improving technology with FDI.

There is likely to be increase in potential growth.

Evidence:

Extract 4

- Less vulnerable to external shocks with improvement in budget deficit  
→ links to better confidence in economy, able to attract more investments.
- More money for growth boosting policies like infrastructural investment.

Extract 5

- Boost spending on health, education and infrastructure.
- → "Better infrastructure should lower transport costs and attract more business investment—including from foreigners. With a healthier and better-educated workforce, Indonesia would rely less on extractive industries. Instead, more people could find work in services and higher-value manufacturing—semiconductors and smartphones rather than T-shirts and trainers."
- Reduce budget deficit

- **AD**

AD may increase with increased government spending on areas like infrastructure etc. Attract more investments with positive business outlook so I will increase too. G and I increase, hence AD likely to increase. Actual growth increases.

**Evaluative statement:** Likely to benefit LR/SR growth or not.

From extract 5: "Jokowi can move on to thornier problems of streamlining regulatory tools and government bureaucracy." This hints that there are inherent problems present in the Indonesian government which may hinder growth, for example, due to corruption or bureaucracy. Will see positive impact on LR growth only if the institutional problems are solved.

L3	Well-developed analysis on the impact on both short run and long run growth. Strong support with evidence from data to provide contextualisation to get full 6 mark.	5-6
L2	Well-developed analysis on only long run or short run growth. or Under-developed analysis on both impacts on LR and SR growth.  Answers attempt to use some relevant evidence from data but links may not be strong.	3-4
L1	Weak or no explanation about the impact on short run and long run growth. Answers contain major errors.	1-2
E1	Unexplained judgement	1
E2	Evaluative statement that is supported with sound economic analysis and in context.	2

**Examiners' Comments for CSQ1(c):**

Question requirement:

- a) About half of the candidates DID NOT link their answers directly to growth to answer the question- the better candidates stopped at impact on real national output/income, the rest were hovering around SOL and unemployment level,

which does not answer the question.

Content:

- b) Short run impacts are poorly explained. Few candidates recognised that, due to cost of production increasing, SRAS will decrease. This recognition, in addition to the other relevant analyses, would have put them in the L3 range.
- c) Most candidates wrote that in SR there is an increase in G (spending on education etc) and hence AD increased. Although this answer was accepted, candidates could have recognised that this is more of a LR effect. Instead, with the removal of subsidies, G is more likely to fall in the immediate term and hence AD falls in SR.
- d) About half the candidates also mentioned that due to higher prices, C will fall due to fall in disposable income, which is wrong. These candidates failed to recognise that a fall in purchasing power will not lead to a fall in C, but that with the same amount of money, less goods and services could be purchased (hence negative impact on SOL- which is not what the question is asking for).
- e) A couple of candidates also demonstrated confusion over the term 'budget deficit' and 'BOP deficit'.

**(d) Using relevant data, explain how the use of oil generates negative externalities. [4]**

Definition: Negative externalities are negative uncompensated spill-over effects on third parties who are not involved in the consumption or production of the good. (1m)

External Cost to third party:

- 1) Fall in life expectancy due to health problems brought by air pollution - experienced by people of China who are plagued by the air polluted cities.
- 2) Possible fall in economy's ability to attain sustained growth or maybe fall in employment when MNCs/FDIs withdraw, due to foreign executives leaving. Third parties are the workers in these companies who become unemployed.

[2m]- identify external cost and explain

[2m]- identify third party and explain

Max 4m. Cap at 3m if no relevant data was used.

**Examiners' Comments for CSQ1(d):**

Most candidates managed to at least secure one mark with accurate definition of negative externalities. Some candidates did not define but managed to show understanding with their examples and explanation of external cost and third party.

Overall, there was a lack of appreciation of the wording in the question. The question required an explanation of how...generates negative externalities. Many candidates wrote responses worth a lot more than 4 marks to answer the question "explain how...leads to market failure."

Question requirement:

- a) Many candidates wrote lengthy theoretical explanation about MPC and MPB and how the divergence due to MEC will lead to market failure, instead of focusing

their answer on explaining the external costs on third party.

- b) Candidates were more equipped in explaining external costs than the third parties' effect- they often used general terms like 'people' instead of 'people living around the factories who are not involved in the production of oil' for example.
- c) Most candidates who picked out relevant evidences did not go an extra step to explain the impact (health problems and medical costs incurred, or unemployment, loss in income and hence fall in SOL).

Data reference:

- d) Candidates who did not make explicit reference to relevant data in extracts were not granted full marks. These candidates linked greenhouse emissions to global warming which leads to flooding, or depletion of ozone levels and hence increased skin cancer etc. An explicit link to the extracts would be discussing the impact of air pollution or the impact of FDIs withdrawing (Extract 6 mentioned 'external cost' even!).

**(e) Discuss the effectiveness of tradable permits in reducing the level of carbon emissions. [8]**

**Thesis:** Tradable permits are effective in reducing emission levels.

The government grants each firm a certain number of permits to produce a particular level of pollutants over a period of time. The government ensures that the number of permits issues corresponds with the level of pollution that is socially acceptable at the optimum level of output, where  $MSB=MSC$ .

If a firm can produce its product by emitting a lower level of pollutants than the level allowed by the permits, it can sell its extra permits in the open market to firms that emit more pollutants beyond the level permitted. [explained in **Extract 6** para 1]

Thus the overall level of emissions is set and controlled by the government but the distribution is determined by the market.

**Advantages:**

- Overall level of pollution can be controlled by this system.
- Allocative efficiency is achieved- least cost. If cleaning up or polluting is the least costly, firms will do so.
- (possible argument though not required) System creates an incentive for firms to cut back on pollution. It encourages firms to use cleaner methods of production so that they can sell their excess permits in the market. Firms which are less efficient in cutting down pollution must be prepared to pay for the permits to pollute, thus the external cost of pollution is internalised.

**Anti-thesis:** Tradable permits are not effective in reducing emission levels.

**Disadvantages:**

- It is not easy for the government to determine the number of permits to issue to produce the desired reduction in the level of emissions to achieve allocative efficiency. (**extract 6:** complex task to use regulation to set quotas of carbon emissions to limit emissions from huge number of household, firms etc of different nature. Furthermore, price set is almost always too low to encourage significant



reduction in emissions- There is a need to determine right number of permits available for trading.)

- **Extract 6:** "could suffer from the same limitations of some of these individual measures"
  - **Taxes:** practical difficulties in determining amount of externalities emitted and designing tax of an equal value to external cost, high taxes needed for a good of price inelastic demand.
  - **Regulation:** enforcement may be difficult and costly. Penalties need to be harsh and inspection must be frequent and rigorous. Blunt method.
- (possible argument though not required) Firms that have a sizeable share of the market may be in a relatively stronger position such that they might be able to buy pollution permits in excess of the firms' cost-minimising requirements in order to deter other firms from entering the market. They will then not cut back on their emission levels.

**Evaluate:** Effective or not, dependent on which factors.

Tradable permit allocation and pricing is a complex process. Will not be effective if there is likely to be government failure. For big countries like US/UK, high cost of regulation may be significant. Prices must be adjusted upwards when results show that emission levels are not effectively reduced. Number of permits need to be reduced. May need to adopt a more forceful stance- like China (own knowledge).

Possible Evaluative points:

E marks may be awarded for the following:

- Contextualisation: Evaluation done based on weighing the advantages and disadvantages of different economies, using factors like size of industry etc.
- Theory may not work in the real world, eg. due to political reasons, ability of the government to stand against lobbying to set the optimum amount of permits
- Extent of effectiveness
- Government failure: may not be underestimation of costs but government may deliberately set large number of permits to incentivise firms to join the scheme in the first place, hence price becomes too low.

Note: Candidates do not need to bring in alternative policies. Focus of the question is on tradable permits.

L3	1. Well-developed answer that explained how tradable permit works to reduce emission levels. 2. Explained clearly how tradable permit has limitations in reducing emission levels. 3. Answers may contain few or no minor errors.	5-6
L2	1. Well-developed one-sided answer, i.e. well-explained answer that explained how tradable permit works to reduce emission levels OR well-explained answer that explained how tradable permits has limitations in reducing emission levels. OR 2. Under-developed two-sided answer. 3. Answers may contain some minor errors.	3-4
L1	1. Weak or no explanation about effectiveness / ineffectiveness of tradable permits.	1-2



	2. Answers may contain some major errors.	
E1	Unexplained judgement	1
E2	Evaluative judgement supported with analysis	2

### **Examiners' Comments for CSQ1(e):**

Overall, answers showed a clear lack of familiarity with tradable permits – how these work and the key limitations of the measure when used to tackle negative externalities. This weakness was compounded by the poor understanding of question requirement which led to many answers containing correct but irrelevant content.

#### Question requirement:

- a) Most candidates did not recognise that the question did not require them to bring in alternative policies, and spent majority of their answer explaining about them, such as education/campaign. Those who brought in other policies like imposition of taxes or legislation, which if linked to tradable permits or was relevant, was awarded credit.

#### Content:

- b) More than half of the candidates wrote that big firms will purchase the permits from small firms and this puts them at an advantage, without recognising that they would only do so if their cost of cleaning up is more costly than purchasing the permits, otherwise there is no need for them to monopolise the permits. Candidates need to understand that firms arrive at the decision by weighing the cost of buying a permit vs cleaning up, and will choose the least cost option. Also, there tends to be a lack of linkage from market domination back to the question of reducing emission levels.
- c) Some candidates also did not show understanding that tradable permits come with an initial allocation by the government for both big and small firms, thinking that it is entirely traded by the free market. If the analysis is sound, the point was still accepted, but answers that do not show logical thinking- saying that big firms will force the small firms to sell their permits and subsequently small firms cannot pollute nor continue production so they will be forced to leave the industry, or that the small firms will sell to the big firms and then big firms re-sell it to them at a higher price to exploit the small firms (for both arguments, why will the small firms sell it in the first place!)- then the answers were not credited.
- d) Some candidates who talked about the internalising of external cost made a mistake and mentioned internalising of social costs instead.

**Suggested answers to:**  
**Q2- Troubles in France**

**(a) Using Figure 2, compare the current account balance as percentage of (i) GDP of France with that of Germany, from 2005 to 2012. [2]**

Throughout the time period, France was experiencing a current account deficit while Germany was enjoying a current account surplus; both were increasing.

(Note: deficit/surplus – 1m ; increased– 1m; note that Cambridge used increased as well in N2009)

**Examiners' Comments for CSQ2(a)(i):**

Phrasing:

- a) A large majority of the candidates used the wrong terminology.
  - i. Wrong: current account balance is increasing. Correct: current account balance is improving or current account surplus is increasing / current account deficit is decreasing.
  - ii. Wrong: current account balance is decreasing. Correct: current account balance is worsening or current account surplus is falling / current account deficit is rising.

Question requirement:

- b) A significant number of candidates described how current account balance changed from 2005 to 2012 instead of describing an overall trend.
- c) Amongst candidates who did describe the overall trend of current account balance, they instead focused on the trend and the anomaly for each country instead of comparing between the 2 countries' current account balances.

**(a) Account for France's current account balance from 2005 to 2012. (ii) [2]**

France's current account worsened due to falling exports because of the weakening of competitiveness (E7P2). This weakening happened because of expensive labour and high taxes (E9P2) which lead to French product being less competitive.

(Note: 1m for reason ; 1m for explanation of reason)

**Examiners' Comments for CSQ2(a)(ii):**

Overall poor attempt, with two main weaknesses that can be lethal in a case study: (1) weak or no attempts to explain evidence that was lifted / quoted from the case material, (2) poor content mastery for relevant concepts.

Question requirement:

- a) Many candidates merely lifted the evidence from the case material without explaining why export revenue falls which led to an increase in France's current account deficit.
- b) Misinterpretation of question and explained why budget deficit / public debt increased instead
- c) Majority of candidates explained why France's current account is in a deficit instead of accounting for the increasing current account deficit. The difference is that a deficit is a longer term issue, e.g. poor export competitiveness; whereas an

increasing current account deficit could just be a short-term fall in export revenue and/or rise in import expenditure.

- d) Some candidates failed to understand question requirement and described how the current account balance changed from 2005 to 2012, which was supposed to be the answer for a(i).

Content:

- e) Some candidates explained how budget deficit was the cause of the increasing current account deficit.
- f) Weak understanding of what makes up the current account. A significant number of candidates explained how a fall in investments led to an increase in France's current account deficit. Investments, or specifically foreign direct investment features in the capital and financial account instead.

**(b) What conclusion would you draw from Figure 2 and Table 1 about France's economic performance from 2008-2012? [3]**

France's economic performance, which is about the country achieving the 4 macro aims, in general worsened. Although GDP remained fairly consistent, consumer prices had been rising in a muted fashion. This could signal inflation is starting. Further, unemployment increased and public debt worsened which means increasing loss of potential output along with weakening of government budget. To add, from Figure 2, the current account deficit as a % of GDP actually increased.

(Note: 1m for overall ; 1m for using an indicator to back overall stand capping at 2m)

**Examiners' Comments for CSQ2(b):**

Majority of candidates could score full marks by correctly interpreting at least 4 macroeconomic indicators with an overall comment on France's economic performance.

Data interpretation:

- a) Majority misinterpreted the change in consumer prices as falling and thus deflation.
- b) A couple of candidates used high unemployment. The term high describes the level of unemployment but to draw a conclusion of France's economic performance in 2012 compared to 2005, there is a need to describe the change (i.e. increase) in unemployment.

Phrasing:

- c) Many wrote current account balance is increasing. It should be current account deficit increased or worsened. See Examiners' Comments for CSQ2(a)(i).

Content:

- d) A few also mixed up unemployment with size of labour force. Unemployment increased hence productive capacity decreased which is incorrect!

**(c) Identify and explain the cause of rising unemployment in France. [3]**

Cyclical unemployment is the type of unemployment caused for falling AD. Falling business

confidence together with firms putting investment on hold, falling consumer expenditure and cut in government spending (E7P2) is expected to lower AD. As AD falls, lesser output is produced and hence lesser labour and resources are required leading to cyclical unemployment.

(Note: 1m for identifying the cause; 2m for correct explanation of the cause)

### **Examiners' Comments for CSQ2(c):**

The performance for this question is probably the best across all the parts for Question 2. Almost all the candidates were able to identify the causes for the deficiency in the AD and many were able to explain how that led to lesser labour being employed causing cyclical unemployment.

### Question requirement:

- a) The only major problem with this question is that some candidates abruptly conclude that cyclical unemployment will increase when AD falls. Such answers assume that the examiners understand that an AD-AS framework is being used to explain cyclical unemployment. The required analysis is to use a brief explanation about AD falls leading to an unplanned inventory accumulation, leading to firms cutting back on production and hiring less factors of production including labour etc.

### **(d) Explain why the French government is unable to cut the budget deficit.**

**[6]**

To begin, a budget deficit occurs when government spending is greater than tax revenue collected.

First, to cut budget deficit, France will need to raise taxes. This is however difficult as taxes are already very high (E7P3) thus leaving very little room for tax cuts (1m). These cuts are hard to achieve as cutting would be politically unpopular while also driving top-earners away from France which is detrimental (2m).

Second, to cut budget deficit, France will need to cut spending. This is however difficult as government spending through tax reforms and cutting family benefits (E7P4) (1m) is contractionary. This may further worsen the already weak economy (2m).

Thus, cutting the budget deficit is difficult for the French government.

Other acceptable answers for inability to raise taxes:

- i. Income in France is decreasing → weak economy → lower taxes collected
- ii. Increase taxes → contracting the economy through falling C
- iii. High unemployment in France, tax revenue collected already very low → budget deficit cannot be cut

Other acceptable answers for the inability to cut G:

- i. AD in France is already falling so need to increase G to expand the economy which will worsen budget deficit
- ii. The already high taxes dampened C and I → needs G to increase AD → cannot cut G → cannot cut budget deficit
- iii. The need to subsidise French industries (E9P3) → protectionism

### Examiners' Comments for CSQ2(d):

#### Question requirement:

- a) Some answers tend to be theoretical, e.g. tax increases, after tax profits & disposable income falls → I and C falls → AD falls (whereas extract was hinting at taxation on top earners) OR G cannot decrease because government projects are ongoing (theoretical answers cap at 2m for either portion, i.e. if both T and G are theoretical and all explained well 5m). To score full credit in case study questions, answers need to consider the case material, making references where relevant.
- b) A handful of scripts only analysed the tax portion only, i.e. no mention about government spending → cap 3m
- c) Majority of candidates who defined budget deficit correctly were able to pick out from the data that taxes cannot increase due to high taxes as well as the negative effects of taxes, e.g. driving top earners out of the country (E9P3) but fail to explain the detrimental effects of driving top earners out of the country.

#### Content:

- d) Many candidates mistook budget deficit for BOP deficit – answers talked about low export revenue, worsening current account balance, worsening BOP deficit or policies unable to improve BOP deficit – no marks awarded.
- e) Those answers that mentioned both T and G showed better application of why taxes cannot increase to correct budget deficit but not the reason for the inability to reduce government spending. E.g. reduction in G on pension reforms and benefits will reduce C and therefore contractionary → this is an indirect impact on the economy which is not awarded full credit (1 out of 2 m awarded for explanation).

### **(e) Explain how “France’s version of austerity measures” is expected to impact the French economy. [6]**

“France’s version of austerity measures” means a cut in government spending **and** a cut in taxes. A cut in government spending lowers G while a cut in tax rates increases C & I. Assuming that the cut in government spending and cut in taxes results in an overall fall in AD, real NY falls via the multiplier effect. Since the economy is already having rising unemployment, this will further worsen unemployment as workers are made redundant since lesser output is produced. BOT, and hence BOP, is expected to worsen if the cut in spending induces an increase in import.

(Note: Candidates may instead explain that the effect of austerity which may in fact be expansionary. This is also to be awarded with full credit as long as correct analysis and skills are shown as per level descriptor.)

Level	Descriptor	Marks
L1	Identifies austerity as changes in government spending and taxes with little to no elaboration about its effect on the French economy. May contain major errors in explanation.	1-2
L2	Explains correctly austerity as government spending without any mention of cut in taxes. Well elaborated argument that shows the impact on the French economy.	3-4

L3	Explains correctly austerity as government spending together with a cut in taxes. Well elaborated arguments which show the impact on the French economy. Full marks awarded only if effects on external economy is explained.	5-6
<p><b>Examiners' Comments for CSQ2(e):</b>  This question was generally done well. Most candidates managed to identify the measures and explained the overall impacts on the economy.</p> <p><u>Question requirement:</u>  a) A large number of candidates did not explain how <u>both</u> measures (cut in government spending and tax cuts) impact the French economy.  b) Many candidates failed to explain the impact of tax cuts (corporate tax and / or payroll tax) on the cost of production and their impacts on the AS and the economy.</p> <p><u>Data interpretation:</u>  c) Some candidates misinterpreted tax cuts to include a cut in personal income tax, bringing about an increase in C, thus leading to a rise in AD due to increases in both C and I.  d) A number of candidates failed to realise that the austerity measures, work in opposite directions, i.e. cut in government spending → fall in AD; tax cuts → rise in AD. Overall impact on AD was not explained as a result.</p>		
<p><b>(f) With reference to the data where appropriate, assess whether the French government should adopt protectionism to deal with its macroeconomic problems. [8]</b></p>		
<p>The main macroeconomic problems faced by France seem to be slowing GDP growth together with falling employment and a worsening current account balance.</p> <p><u>The benefits of adopting protectionism</u>  Industrial subsidisation together with increased protectionism (E9P2) helps to lower prices of export which helps France to regain export competitiveness. This will help to raise exports which will improve the current account and will also raise AD which brings about an increase in r.NY via the multiplier effect. Further, it also reduces cyclical unemployment.</p> <p><u>The costs of adopting protectionism</u>  Protectionism should not be used as it leads to reduction in gains from trade. Protectionism goes against the theory of comparative advantage where countries specialise in producing goods they have a comparative advantage in and trade at a mutually-beneficial terms of trade such that both nations can now consumer beyond their production possibilities. Thus, with more protectionism, these gains will be lost instead.</p> <p>Protectionism may also lead to French firms becoming complacent and inefficient. This comes in the form of higher prices of output that reduces export competitiveness (E7P2). This reduction leads have led to worsening of the current account. Further, AD also decreases leading to fall in employment and national income.</p> <p>Protectionism may also lead to a subsidy race (E9P2) which reduces the gains from protectionism due to retaliation. This will thus not be beneficial to both France and her</p>		



trading partners due to beggar-thy-neighbour effect. This effect occurs as falling X in French trading partners lead to falling economic growth resulting in these partners purchasing lesser French export consequently.

**Evaluative Conclusion:**

Protectionism, depending on the type and effectiveness, may be helpful in the short run but reduces the gain from trade. Further, the trade deficit continues to grow in France. Thus, it may not be ideal to deal with the issues at hand. Instead, other policy measures such as retraining of workers to regain export competitiveness may be more helpful.

Level	Descriptor	Marks
L1	Identifies some relevant content about protectionism how it affects the economy. Higher scores awarded if linked to macroeconomic problems.	1-3
L2	One-sided explanation of how protectionism should/should not be adopted or an underdeveloped two-sided explanation. Limited use of case evidence.	4-5
L3	Well explained two sided arguments about how protectionism may help to deal with and also worsen macroeconomic problems faced.	6-7
E1	Makes stand with brief but valid justification.	1

**Examiners' Comments for CSQ2(f):**

The performance for this question is among the worst across all the parts for Paper 1. The main problem is that of data interpretation – begin by re-reading the data as you read through the following comments.

Data interpretation:

- a) The biggest concern is the inability of candidates to understand/comprehend the extracts correctly. Many candidates simply took matters out of context and demonstrated their poor understanding of what protectionism means. For example, those who wrote about sky-high payroll taxes, excessively bureaucratic labour policies, increased tax rates on the top earners as protectionism did not understand how these measures/steps taken by the French government mentioned in extract 9 are not protectionism. The following are explanations for the sections taken out of context:
  - i. Sky-high payroll taxes, bureaucratic labour policies are probably reasons why French exports lacks competitiveness and the French firms suffer in the face of globalisation (reasons to support the case for protectionism)
  - ii. Increased tax rates on the top earners is probably the way the French government will go about financing the subsidies (method of protection)
- b) Slightly better answers included those who provided a generic explanation for the case for and against protectionism, e.g. protection of infant industries... over-reliance on government etc. Such answers demonstrated poor case study skills as they failed to appreciate the urgency of immediate concerns highlighted in the case material, e.g. 62,000 companies would face bankruptcy, pledged billions of euros to fund (coupled with public debt figures in Table 1), subsidy race with the rest of the world (i.e. retaliation), increased tax rates on top earners to finance the subsidies.

Question requirement:

- c) In cases where candidates were able to appreciate the context and address the

question correctly, many were let down by poor development of their explanations, i.e. merely quoting sentences or paragraphs from the case material.



3. (a) Explain how the price mechanism allocates scarce resources among competing needs in a free market. [10]
- (b) Economic problems are often complex. As a result, the government may sometimes use a policy mixture where more than one policy is used, to tackle an economic problem more effectively.

With the use of a merit good example, explain and evaluate a policy mixture that a government might use to bring about a more efficient allocation of resources. [15]

**Suggested Answer 3(a)**

(a)	Explain how the price mechanism allocates scarce resources among competing needs in a free market.	[10]
(b)	Economic problems are often complex. As a result, the government may sometimes use a policy mixture where more than one policy is used, to tackle an economic problem more effectively.  With the use of a merit good example, explain and evaluate a policy mixture that a government might use to bring about a more efficient allocation of resources.	[15]

**Examiners' Comments for EQ3(a):**

Content:

- a) Most candidates focused on the signalling function of the price mechanism. They were able to do this well using the demand / supply analysis, by explaining how the market equilibrium changes when there is a shortage and/or a surplus. Nonetheless, a common weakness is not clearly explaining the price adjustment process, i.e. able to identify that there is a shortage in the market, but not being able to clearly state that when there is a shortage, it means that at the given price level, quantity demanded exceeds quantity supplied. More commonly, a vague explanation of "demand is greater than supply" is given instead.
- b) Candidates who did attempt to explain the rationing and/or the incentive functions, usually did so superficially. Please read the suggested answer for details on how to explain the rationing and incentive functions.

Question requirement:

- c) Most candidates did not even mention the rationing and/or incentive functions.
- d) Many candidates did not explain scarcity and its implications.
- e) Explaining both a shortage scenario and a surplus scenario. One scenario would have sufficed
- f) Weaker candidates merely regurgitated definitions of scarcity, demand and supply.
- g) Several candidates skipped this part of the essay entirely.

Question requirement:

1. Explain the meaning of "allocate(ing) scarce resources among competing needs", i.e. scarcity, choice and opportunity cost
2. Explain the operation of the price mechanism in a free market economy by tracing through the effects of a change in demand or supply.

**Introduction:**

3. As limited resources are met with unlimited wants, there is a need for an efficient allocation of resources so that society's welfare can be maximised.
4. Explanation on **scarcity**
  - Scarcity arises because people have unlimited wants but resources are limited.
  - Thus society needs to make choices on what to produce, how much to produce and for whom to produce.
  - For every choice made, opportunity cost is incurred – the next best alternative forgone.
  - This is essentially the central problem of economics. Thus there is a need for resources to be allocated in a way that will best benefit society – via the price mechanism in a free market.

**Body (version 1): (taken from 2014 J1 H1 Promos EQ, but swapped the order of incentive / rationing function to improve flow of answer)**

5. Price mechanism as a **signalling function**
  - Price serves as a signalling function – tells us whether more or less resources are required.
  - An increase in price signals to producers that there is a shortage and thus more resources need to be channelled into the production of the good.
  - A fall in price signals to producers that there is a surplus and fewer resources should be channelled into the production of the good.
  - Thus changes to price levels indicate to producers whether to expand or cut back on production.
6. Price mechanism as an **incentive function**
  - When price increases arising from a shortage, supply is encouraged.
  - Higher prices give producers greater incentives to produce as there is a possibility of greater revenue and profits.
  - When prices fall, the reverse occurs, i.e. there is less incentives for producers to produce the good.
7. Price mechanism as a **rationing function**
  - When price increases arising from a shortage, demand is discouraged and only those who are more willing and able to pay for the good will get to enjoy the good.
  - When prices fall, the reverse occurs, i.e. there will be more people with willingness and ability to pay for the good.

\*Note: Candidates may use diagrams to illustrate how shortages/surpluses have upward/downward pressure on prices and how changes in price lead to changes in Qd and Qs via the functions above.

**Body (version 2): four fundamental questions approach**

8. Demand determines “what” and “for whom” firms should produce
9. Supply determines “how” firms should produce
10. Interaction of demand and supply determines “how much” firms should produce

**Conclusion:**

11. Under conditions of perfect knowledge, perfect mobility and absence of externalities the price mechanism functions efficiently in allocating scarce resources.

**Mark scheme for 3(a):**

<b>L3</b>	1. Clear explanation of the meaning of scarcity and its implications with clear links to how the price mechanism in a free market economy allocates scarce resources through the effects of a change in demand or supply.	<b>7-10</b>
<b>L2</b>	2. Under-developed explanation, e.g. explanation of scarcity and how shortages/surpluses affect the prices of goods, <u>without clear links</u> on how the price mechanism allocates scarce resources. OR 3. developed explanation only of how price mechanism allocates resources <u>without</u> explanation on how scarcity arises and its implications. OR 4. developed explanation only of how scarcity arises and its implications <u>without</u> explanation on how price mechanism allocates resources. (Max L2–5)	<b>5-6</b>
<b>L1</b>	5. An answer which has some basic correct facts such as defining scarcity and providing incorrect or little analysis on its implications and how the price mechanism seeks to address this central problem of economics.	<b>1-4</b>

**Suggested Answer 3(b)**

(a)	Explain how the price mechanism allocates scarce resources among competing needs in a free market.	[10]
(b)	<b>Economic problems are often complex. As a result, the government may sometimes use a policy mixture where more than one policy is used, to tackle an economic problem more effectively.</b>  <b>With the use of a merit good example, explain and evaluate a policy mixture that a government might use to bring about a more efficient allocation of resources.</b>	[15]

**Examiners' Comments for EQ3(b):**

Most responses to this question exhibited above average content knowledge, but also seemed uncertain what to focus on in the analysis to earn the necessary credit.

**Content:**

- a) Majority of the candidates did not leverage on their diagrams to deepen their analysis, or they showed difficulties reflecting their analysis on their diagrams. This was often due to the lack of understanding that subsidies were to producers or to consumers. For example, candidates who mentioned that subsidies will reduce hospital's cost of production for healthcare, ended up shifting the MPB curve to meet at  $Q_s$  – the correct analysis in this case should have been a change in MPC since it is related to the hospital's costs.

- b) Very few candidates tried to give an evaluation; perhaps there was uncertainty about how to do so effectively.

Question requirement:

- c) A significant number of candidates explained how the market fails with the presence of merit goods instead of focusing on policy measures to correct the market failure, hence failing to address the question as a result.
- d) Most candidates tended to evaluate policies individually, without linking back to the question requirement of a policy mixture which in fact requires them to combine policies to complement each other.
- e) Many candidates gave descriptive answers, or wrote about policies without bringing in their limitations. This was either a problem of time management (tendency for some answers to be really short) or a lack of awareness of what is required by the question.

**Question requirement:**

12. State the sources of market failure that arise in the merit good example chosen for discussion, e.g. positive externality and/or private benefits are undervalued.
13. Choose a policy mixture of more than one policy (i.e. at least two) – explain how the policies chosen work.
14. Overall, provide an evaluation of the policy mixture. Implicitly the policy mixture discussed should be an ideal one, e.g. policies are complementary in nature; however high credit can still be awarded if the policy mixture is not appropriate, as long as there is rigorous evaluation that accompanies this policy mixture.

**Introduction:**

15. Identify the merit good example chosen. [e.g. healthcare]
16. State the sources of market failure that arises in this merit good example. [e.g. positive externality, undervaluation of the private benefits of consuming healthcare services]
  - The explanation for these market failure sources can be done as the candidates explain how the policies work.

**Body Version 1 (TAE-TAE structure):**

17. Thesis: explain how policy 1 works, which source of market failure it addresses / objective of policy.
  - Explain the positive externality that arises from consumption of healthcare services. [e.g. reduced transmission of communicable diseases to others when one consumes a vaccination]
  - Explain that when left to the free market ( $Q_e$  at  $MPC = MPB$ ), the consumption of healthcare services will be under-consumed (compared to  $Q_s$  at  $MSC = MSB$ ) because of the divergence between  $MPB$  and  $MSB$  due to  $MEB > 0$ .
  - Explain that policy can help achieve the socially optimal level of consumption at  $Q_s$ . [e.g. the use of a subsidy to healthcare service providers will then reduce the  $MPC$  of individual consumers, thus increasing  $Q_e$  to  $Q_e1=Q_s$  where  $MPC$  (with subsidy) =  $MPB$  and also  $MSC = MSB$ ]
18. Antithesis: explain the limitations of policy 1.
  - Limitations that affect effectiveness of policy, such as very low price elasticity of demand, inability of government to estimate the  $MEB$  and subsequently administer the right size of subsidy.

- Limitations that affect feasibility of policy, such as cost of subsidy which is related to the size of subsidy required.
- **\*\*Note:** specific subsidies are often deemed to be inequitable, but we will not expect this argument in a H1 essay; credit can be awarded if used.

19. (Point) Evaluation

- Subsidy is appropriate in addressing the root cause of the externality problem, i.e. incentivising consumers to internalise the external benefits of consumption and to increase their consumption of healthcare services.
- Depending on the type of healthcare services, the price elasticity of demand may vary; e.g. primary healthcare is considered a necessity and its demand can be considered price inelastic, while some forms of tertiary healthcare could be considered more of a luxury good and the demand could be considered more price elastic.
- Depending on the efficacy of the government, the degree of imperfect information that the government faces could vary.
- Depending on the size of the MEB (which could depend on the type of healthcare service, i.e. larger MEB for primary vs. smaller MEB for tertiary healthcare), the socially optimal size of subsidy will vary. Therefore, the required subsidy in primary healthcare is likely to cause a greater strain on government resources as compared to tertiary healthcare.

20. Thesis : explain how policy 2 works, either to address a different source of market failure / different objective of policy, or to complement policy 1

- Explain that consumers often undervalue the private benefits of consuming healthcare services. [e.g. underestimate the healthcare risks that one faces and chooses not to go for regular health checks, or refusal to seek treatment for illnesses that are deemed to be minor but actually have serious repercussions on one's health]
- Explain that when left to the free market ( $Q_{e1}$  at  $MPC = MPB$  with imperfect information), the consumption of healthcare services will be under-consumed (compared to  $Q_e$  at  $MPC = \text{actual } MPB$ ) because of the divergence between actual MPB and MPB with imperfect information.
- Explain that policy can help achieve the privately optimal level of consumption at  $Q_e$ . [e.g. the use of education campaigns to educate consumers about the true private benefits of consuming healthcare services, this will increase the MPB of individual consumers, thus increasing  $Q_{e1}$  to  $Q_e$  where  $MPC = \text{actual } MPB$ ]

21. Antithesis: explain the limitations of policy 2.

- Limitations that affect effectiveness of policy, such as poor reception to education campaigns, or takes a long time to change entrenched mindsets.
- Limitations that affect feasibility of policy, such as cost of education campaigns.

22. (Point) Evaluation

- Education campaigns are appropriate in addressing the root cause of the problem, i.e. reducing the level of imperfect information in the market.
- Any reasonable evaluation on the likelihood of the government facing the limitations explained.

23. TAE for policy 3 (if student chooses to do so)

**Body Version 2 (TTT-AAA structure with overall evaluation):**

24. Explain the sources of market failure.

25. Thesis: Explain the policy mixture (two or more policies) used to tackle the market failure.
26. Antithesis: Explain the limitations of individual policies, or limitations of policy mixture.

**Overall Evaluation:**

27. Possible evaluative points:

- Explaining how the policies complement one another; or highlighting that the policy mixture is used to address different aspects of the market failure.
- There is no need for policy mixture if one policy alone is effective. [e.g. possible for subsidy alone to resolve the issue of under-consumption in healthcare services due to positive externality and undervaluation of private benefits; however, the size of the subsidy may need to be large and not financially sustainable for the government, and it is not appropriate (does not address root problem) in trying to resolve the problem of imperfect information.]
- Possibility of government failure therefore no intervention could be the preferred response. (for H1 not really required, but credit can be awarded)
- Any other reasonable evaluative points.

**Mark scheme for 3(b):**

<b>L3</b>	1. Merit good example is chosen with sources of market failure explained stated clearly. Best answers should recognise both positive externalities and undervalued private benefits present in the case of merit goods. 2. Good use of economic analysis and framework to explain how at least two policies work to achieve an efficient allocation of resources in the presence of merit goods. 3. Good use of economic analysis and framework to explain the limitations of the above-mentioned policies.	<b>9-11</b>
<b>L2</b>	4. Merit good example is chosen with sources of market failure stated clearly with some attempt at explanation. 5. Good use of economic analysis and framework to explain how policy works to achieve an efficient allocation of resources in the presence of merit goods. However, only one policy is well-explained; or the overall explanation of two or more policies is underdeveloped. 6. Good use of economic analysis and framework to explain the limitations of the above-mentioned policies. However, the limitations are well-explained only for one policy; or the overall explanation of limitations of two or more policies is underdeveloped. 7. Alternatively, student only explained how the policies work or the limitations of the policies; i.e. did #2 well without #3, and vice versa (see L3 descriptors).	<b>6-8</b>
<b>L1</b>	8. Answer that does not address the question directly, or 9. Answer lacks scope of points <u>and</u> depth of analysis.	<b>1-5</b>
<b>E2</b>	a) Clear evaluation supported by sound economic analysis.	<b>3-4</b>

<b>E1</b>	b) Weak attempt to provide an evaluation with little or no economic justification.	<b>1-2</b>
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4. The increasing trend of globalisation involves more world trade and more movement of capital and labour, creating opportunities for Singaporean workers and firms.

(a) Explain the gains from globalisation. [10]

(b) However, not all workers will benefit as increasing globalisation could potentially lead to increasing unemployment as well.

Evaluate the supply-side policies used in response to the above. [15]

**Suggested Answer 4(a)**

The increasing trend of globalisation involves more world trade and more movement of capital and labour, creating opportunities for Singaporean workers and firms.		
(a)	Explain the gains from globalisation for Singapore.	[10]
(b)	However, not all workers will benefit as increasing globalisation could potentially lead to increasing unemployment as well.	[15]
	Evaluate the supply-side policies used in response to the above.	

**Examiners' comments for EQ4(a):**

Majority of candidates earned a L2 for this part, with many answers containing scope addressing "more world trade, more movement of capital and labour", but often without the sufficient depth of analysis to score L3.

It was good that a majority of the candidates recognised the need to use the theory of Comparative Advantage as an economic concept to explain the gains from trade and globalisation. Candidates who did this well and had the required scope of the answer would usually score L3.

**Question requirement:**

- a) Majority of candidates ignored the preamble and did not attempt to suggest why globalisation leads to increase in trade, labour and capital flows. The following are two examples
- Trade.** Weaker answers will immediately start by saying that "more trade means there is more export revenue for Singapore, thereby increasing Singapore's net exports, increasing AD etc...." The stronger answers will make an effort to link "increasing trend of globalisation" to "more world trade", e.g. "...the increasing trend of globalisation means the lowering of trade barriers / more free trade agreements and/or cheaper transportation costs, which makes the price of exports and imports cheaper for Singapore etc...."
  - Capital / Labour.** Weaker answer will immediately start by saying that "Singapore attracts more FDI and foreign talent, thereby increasing AD and AS etc...." The stronger answers will explain how Singapore's economic stability, pro-business policies (such as low corporate tax, other incentives for setting up business operations in Singapore) etc. are some factors why we have a net inflow of FDI and talent as we observe an increasing trend of globalisation, leading to...(explanation of benefits of net inflow of FDI and talent)"



- b) Another common weakness amongst many candidates was not making specific references to characteristics of Singapore's economy. This was required in the question, and candidates who did not do so could only score a maximum of low L3.

Content (depth of analysis):

- c) This weakness was observed more for explanations on how Singapore could gain from more capital and labour inflows. There were many descriptive answers such as, "because Singapore has an aging population, more labour inflows mean that Singapore can continue to keep her workforce young etc...." What is expected in an economics essay is to link the positive net inflow of labour (that means more foreign talent coming in than local talent leaving) to the aggregate supply (AS) – the positive net inflow of talent leads to an increase in the quantity of labour (more labour) and improvement in the quality of labour (more skilled labour), which increases AS. Then explain the impact on full employment level, equilibrium of national income, general price level etc.

Content (accuracy):

- d) While many candidates tried to explain the theory of Comparative Advantage, there was a sizeable group who could not do it well. The common mistakes were:
- i. No mention of differences in opportunity cost throughout the explanation.
  - ii. It is opportunity cost incurred in production of one good – don't phrase this creatively.
  - iii. No links between differences in opportunity cost to differences in factor endowment and/or level of technology.
  - iv. No references to Singapore even if the above point was done theoretically.
  - v. No explicit mention of the gains from specialisation and trade, such as increasing consumption possibilities, or increasing world and Singapore's output etc.
  - vi. Mixing up theory of CA with another demand-side reason, such as tastes and preferences / variety of goods consumed. For example, if Singapore specialises and trades according to theory of CA, Singapore will export petrochemicals while importing cars. This will help to satisfy consumers' tastes and preferences for a variety of cars which improves material SOL. Both reasons are acceptable, but when put together like this, it gives an impression that candidates don't have clarity for either and are just regurgitating bits of content.
- e) There was a tendency by many candidates to lump FDI and hot money together. An increased net inflow of FDI can be taken to increase the investment function (I) in AD, and can also increase the quantity (amount of capital goods) and the quality (new technologies that can improve productivity) of factors of production – both AD and AS can increase as a result. Hot money, on the other hand, refers to short-term capital flows. Unless there is specific reference to how the mobility of hot money in/out of Singapore has helped Singapore build up its financial sector globally, otherwise there is little economic impact apart from fluctuations in exchange rate – even this is minimal because of how closely our central bank, MAS, monitors our exchange rate changes.
- f) At least 15% of candidates made the following error of mixing up the multiplier process with the determinants of consumption function. The increase in AD, as long as there is spare capacity, will lead to an increase in real national income. This will lead to induced consumption increasing, which is explained as part of the multiplier process. The error observed is how some candidates would explain

the increase in induced consumption as a separate point, arriving at the conclusion that this is another reason why Singapore is gaining from globalisation. It is not a separate reason.

**Question requirement:**

1. Use the preamble as a trigger to explain the three economic components of globalisation – (1) flow of world trade, (2) movement of capital and (3) movement of labour.
2. Explain the gains of globalisation in terms of the achievement of economic objectives, in the case for Singapore.

*Expected scope:*

3. At least three possible gains from globalisation in terms of achievement of economic objectives, e.g. macroeconomic and microeconomic objectives.
4. At least one of the gains could address the statement in the preamble, though candidates should not be penalised if it is not done so.

**Body: (taken from trade and globalisation notes)**

*Possible points (from lecture notes)*

Gains (benefits) from free trade

5. The benefits of globalisation in turn are essentially based on the gains from trade. This is due to the principle of comparative advantage, which allows a country to specialise in the activities that it does best, given its labour, natural resources and technology. World output will increase due to specialisation and countries can now obtain the good in which it does not have a CA in at a lower opportunity cost than if it produced the good itself. Thus, when countries are able to exploit their comparative advantage, they can consume beyond their production possibility curve and enjoy a higher standard of living.
6. Besides this, free trade brings along other benefits. It can stimulate economic growth, promote greater efficiency and economies of scale amongst firms and lead to lower prices and greater variety for consumers (refer to section on 'Benefits of Free Trade').

*Microeconomic benefits from free trade*

7. Specialisation in the area of comparative advantage with subsequent free trade increases the global output and consumption
8. Free trade increase competition resulting in lower price and improved products
9. Free trade allows the firms to reap economies of scale
10. Free trade also provides greater choice and variety for consumers

*Macroeconomic benefits from free trade*

11. Export as an 'engine for growth'

Gains (benefits) from attracting talent and capital into the country – for the economy

12. Many developed countries face a decreasing birth rate and a shrinking labour force. This has spurred them to compete aggressively for foreign talent. If countries can increase this pool of workers in the economy, it can help raise the quantity and quality of its labour force. Productivity will rise. With a higher productive capacity, the long run aggregate supply will then shift to the right. The country will thus be able to sustain its economic growth over a longer term.

13. Similarly, countries compete to attract capital flows, especially for foreign direct investments (FDIs), because they can help to achieve actual and potential growth. In the short run, greater investment spending will stimulate aggregate demand to rise, as investment is a component of AD. This in turn can generate more production and lead to a rise in employment and national income through the multiplier effect. In the long run, investment spending increases the amount of capital formation in the country and enhances its productive capacity.
14. A larger capital inflow also improves the capital account in the balance of payments and helps the country to accumulate more foreign reserves.

Gains for firms / individuals: Opportunities for capital and labour to earn higher rates of returns

15. Capital generally flows into countries where it can yield a higher rate of returns. For instance, short-term capital flows like hot money tend to move from one country to another in order to take advantage of the relatively higher interest rates, ceteris paribus. On the other hand, long-term capital flows, such as FDIs, tend to flow into countries where input costs are relatively lower as this can increase the firm's profitability. The opportunity to earn a greater rate of return in the long run fuels such capital flows.
16. Similarly, labour movements across countries are generally motivated by better employment opportunities and higher wage rates offered in other countries. This can stem from high unemployment rates and low wages in their own countries, thereby driving the workers out to search for greener pastures in other countries.

Gains (benefits) on a global level - \*\*not applicable to question which requires an explanation in Singapore's context

17. Globalisation also leads to an increase in the diversity of knowledge and information available to individuals. Countries can now better draw on the expertise and experiences of other parts of the world in laying out the directions for their own economies and societies. Hence, on a global level, globalisation has raised the world income over time, and raising the economic welfare of the majority of the people in the world. This is because a greater international integration of markets provides workers in developing countries access to new ideas and new technologies. Such exposure can increase their productivity and real wages. Statistics have shown that the proportion of people living on less than \$US1 and \$US2 per day have been falling rapidly over the years.

**Mark scheme for 4(a):**

<b>L3</b>	<ol style="list-style-type: none"> <li>1. At least three possible gains from globalisation in terms of achieving at least two to three economic objectives, e.g. macroeconomic and microeconomic objectives, well-explained in the context of Singapore.</li> <li>2. The three aspects of globalisation to be covered, i.e. flow in trade, capital and labour.</li> </ol>	<b>7-10</b>
<b>L2</b>	<ol style="list-style-type: none"> <li>3. Generally L2 answers lack certain elements as compared to L3 answers; however, in general L2 answers must contain some economic analysis in the answer. Some possible indicators of an answer good enough for L2 but not L3:</li> <li>4. Well-developed explanation on only one gain from globalisation</li> </ol>	<b>5-6</b>

	relating to an economic objective(s) in Singapore's context. OR 5. Under-developed explanation on more than one gains from globalisation but lacks complete economic analysis, clear links to economic objectives, or reference to Singapore's context.	
<b>L1</b>	6. Overall undeveloped answer lacking scope and depth in analysis. 7. Likely not to have any explicit reference to Singapore's context.	<b>1-4</b>

### **Suggested Answer 4(b)**

<b>The increasing trend of globalisation involves more world trade and more movement of capital and labour, creating opportunities for Singaporean workers and firms.</b>		
(a)	Explain the gains from globalisation for Singapore.	[10]
(b)	<b>However, not all workers will benefit as increasing globalisation could potentially lead to increasing unemployment as well.</b>  <b>Evaluate the supply-side policies used in response to the above.</b>	[15]

### **Examiners' comments for EQ4(b):**

Majority of candidates earned a L2 for this part, with many answers explaining supply-side policies typically as education and training / re-training. However, few candidates offered any other supply-side policies beyond this, and almost none were able to distinguish between education (longer term, at an earlier stage of life) and training / re-training (shorter term, during the work years).

### **Question requirement:**

- The majority of candidates did not identify the cause(s) of unemployment arising from globalisation. The candidates who did better would explicitly explain how increasing globalisation would lead to, for example, an increasing rate of structural unemployment, and therefore the supply-side policies discussed are targeted to solve structural unemployment.
- The next most common problem observed was how a large number of candidates introduced policies that could not be considered supply-side in nature for discussion, e.g. interest rate policy.
- As mentioned earlier, the scope of supply-side policies offered for discussion was usually overly narrow. There is a wide range of supply-side policies that could be used for discussion such as direct wage subsidies to incentivise firms to continue hiring labour instead of switching to capital, removal / reduction of regulation in the labour markets such as lowering minimum wage levels to make it cheaper to hire labour, reducing labour inflow to protect the jobs of domestic labour etc.
- Only a few candidates also suggested policies to deal with the consequences of unemployment if it was deemed difficult to solve the problem of increasing unemployment directly, such as providing more welfare for the unemployed etc.
- Many candidates did not explain the limitations of the policies raised.

### **Evaluation:**

- There was little attempt at evaluation by most candidates. The following are good examples of evaluation (non-exhaustive):
  - The increase in government expenditure from supply-side policies will be likely to worsen the government budget balance. If the government is

already suffering from a poor government budget position (i.e. budget deficit and budget debt), then it is less feasible to use a supply-side policy that requires a significant level of expenditure.

- ii. A mixture of supply-side policies is required to help manage increasing unemployment presently as well as in the future. For example, while the government revamps the education system, or diversifies its industry sectors in the economy which will take time to bear fruits, the government also needs policies that can have a more immediate impact such as implementing more re-training and up-skilling programmes for existing workers to learn skills required by the newer industries as well as wage subsidies to specific sectors to dampen any potential increase in unemployment / delay the exit of certain industries.

### Question requirement:

18. While the statement in the question mentions one macroeconomic problem that may arise from the increasing trend of globalisation, the scope of the essay is not limited to increasing unemployment as the only economic problem. Candidates can and should address related economic objectives such as rising income inequality that is one of the outcomes of increasing unemployment.
  - A narrower question would have been “evaluate the supply-side policies used to address the increasing unemployment”.
  - The actual question is broader, i.e. “...in response to the above” was deliberately left open to different possible interpretations.
19. The candidates are required only to evaluate the supply-side policies used, without any need to mention other macroeconomic and/or microeconomic policies. But there is a very broad scope of supply-side policies available for use.

### Introduction:

20. Identify the possible causes of unemployment due to increasing globalisation. This should point more towards structural unemployment; however, Singapore’s openness to trade does make the economy more vulnerable to trade cycles of key trading partners, which could lead to cyclical unemployment. The other causes of unemployment (frictional, real-wage, seasonal etc.) are unlikely to be significant causes.

### Body Version 1 (TAE-TAE structure):

21. Thesis: explain how supply-side policy 1 works, which cause of unemployment it addresses / objective of policy.
  - Explain how increasing globalisation leads to unemployment. [e.g. structural unemployment]
  - Explain how supply-side policy works to reduce unemployment.
  - And/Or, explain how supply-side policy works to mitigate the negative effects of increasing unemployment.
22. Antithesis: explain the limitations of supply-side policy 1.
  - Limitations that affect effectiveness of policy.
  - Limitations that affect feasibility of policy.
  - Limitations that involve a negative impact on other economic objectives.
23. (Point) Evaluation
  - Whether policy is appropriate, i.e. addresses root problem plus whether all the limitations explained above will hold in Singapore’s context.
24. Repeat TAE structure for a second supply-side policy

25. Repeat TAE structure for a third supply-side policy (optional if first two are well-developed)

**Body Version 2 (TTT-AAA structure with overall evaluation):**

26. Explain the cause(s) of increasing unemployment due to increasing globalisation in Singapore.
27. Thesis: Explain the various (at least two) supply-side policies that can be used to respond to the increasing unemployment, i.e. solve unemployment and/or to mitigate the negative consequences of increasing unemployment.
28. Antithesis: Explain the limitations of individual supply-side policies, and/or common limitations across the supply-side policies discussed.

**Overall Evaluation:**

29. Possible evaluative points, which should be done keeping the Singapore context in mind:
- The choice between market-oriented, prices and income, and interventionist policies.
  - Do all supply-side policies suffer from long time lags?
  - Any key conflict with other macroeconomic goals?
  - Whether cost of supply-side policies is sustainable, given the environment of excessive government spending all over the world.

**Mark scheme for 4(b):**

<b>L3</b>	1. Clear identification and explanation of the cause(s) of increasing unemployment, related to increasing globalisation. 2. The explanation for at least two supply-side policies is well-developed, i.e. how it works to respond to increasing unemployment, and the limitations. 3. There should be a good scope of different types of supply-side policies discussed, e.g. one market-oriented and one prices and income.	<b>9-11</b>
<b>L2</b>	4. Identification of the cause(s) of increasing unemployment, but not explained or not clearly linked to increasing globalisation. 5. The explanation for at least one supply-side policy is well-developed, i.e. how it works to respond to increasing unemployment, and the limitations. 6. OR. At least two supply-side policies are presented, but overall explanation is under-developed. 7. Alternatively, student only explained how the supply-side policies work or the limitations of the supply-side policies, but not both.	<b>6-8</b>
<b>L1</b>	8. Answer that does not address the question directly, or 9. Answer lacks scope of points <u>and</u> depth of analysis.	<b>1-5</b>
<b>E2</b>	a) Clear evaluation supported by sound economic analysis.	<b>3-4</b>
<b>E1</b>	b) Weak attempt to provide an evaluation with little or no economic justification.	<b>1-2</b>