3.   From June 1st 2013, there will be a cap imposed on the number of times financially vulnerable patrons visit a casino each month. Administered by the NCPG, the Casino Visit limit will complement the current Casino Exclusion system by providing another option for individuals and their families to control gambling habits.
                                                    – *Adapted from Channel News Asia 28th May 2013*

a.   Explain with examples, the factors affecting the demand for and supply of gambling services in Singapore.   [10]

Synopsis: Candidates are to explain BOTH demand and supply factors that could affect the market for gambling services in Singapore. Please do note that the market for gambling services and the market for casinos are NOT the same. Candidates do not need to show the impact of the changes in the market as the question only requires an explanation of the factors thus just by stating the direction of the shift or movement along the Demand/ Supply curve would be sufficient. The demand and supply factors stated below are not exhaustive and any plausible and accurate explanation of the factors could also be accepted.

Possible Non-price Demand Factors:
  (i)   **Change in the income levels of people**: A RISE in affluence of the people in Singapore could lead to the demand for gambling services to increase. This is due to the fact that gambling services is a luxury service thus when people have a higher disposable income, they would consume more of it at all price levels. It would bring about a rightward shift of the demand curve since the rise in income levels is a non-price factor change.
  (ii)   **Change in the Government Policies**: An implementation of a new government policy to restrict the number of people entering the casino or any other gambling places could cause the Demand for gambling services to decrease. This could cause a leftward shift of the demand curve and it would mean that people would be demanding less of gambling services at all price levels.

  Possible Demand Price Factor:
  (i)   **Change in the price of gambling services**: Due to a change in the cost of production of gambling services, it could cause a change in the price of gambling services. Assuming that the cost of production for gambling services were to increase, then there would be an upward movement along the demand curve.

  Possible Non-price Supply Factors:
  (i)   **Change in price of factor inputs:** Due to a change in the cost of production, it could be seen that the supply of gambling services could be affected since the suppliers are now not able to produce as much gambling services. This would be a leftward shift of the SS curve. Example could be a possible increase in the wages for croupiers and also the price of plastic chips.
  (ii)   **Change in the number of gambling providers:** With an increase in the number of suppliers or gambling providers, it would cause a right shift of the SS curve. Though the number of legal casinos is controlled by the government, there are

still other illegal casinos around. Such as the increase in Casino cruises or illegal gambling dens.

Possible Supply Price Factors:
(i) **Change in the price of gambling services**: Due to any changes in the above demand non-price factors, it could affect the price of gambling services in Singapore. This could bring about a upwards or downwards movement along the SS curve.

Level	Descriptor	Marks
L3	Clear explanation of **BOTH** demand and supply factors with contextual examples. Accurate description includes the correct identifying of a shift or movement along the demand and supply curves. Any 2 demand AND 2 supply factors (both price and non-price factor allowed)	7-10
L2	Clear explanation with examples of Demand **OR** Supply factors with contextual examples. Or candidates who explained BOTH demand and supply factors with examples that are not in context or a weak explanation	5-6
L1	Mere listing of Demand and/or Supply factors	1-4

b. Discuss the view that this new policy of imposing a cap on the number of visits for financially vulnerable patrons is the best option available to tackle the problem of gambling addiction in Singapore. [15]

Synopsis: Candidates are required to examine how the new policy (ie a quota) set on the financially vulnerable people would useful. In this case, the students would first have to show how there is a market failure resulting from gambling on the financially vulnerable (hence the x-axis would require it to be for the financially vulnerable). After showing how the quota would be useful, the candidates would have to show the limitations and also the introduction of other policies that can be implemented. Limitations of the other policies and also a conclusion would be required.

Introduction
- Identify and define POSSIBLE sources of market failure: Demerit good and Negative externalities from consumption. (EITHER ONE will do)

Body
- Explain one source of market failure in the market for casinos
- Demerit Good: Explain why governments view casino gambling as a demerit good.
- In the free market, there will be an over-consumption of casino gambling as consumers may be unaware of the negative externalities associated with its consumption.
- Identify and explain that in the case of casino gambling:
- Private benefit (MPB): refers to the enjoyment, the excitement experienced of betting against the odds in the hope of winning, a reward that an individual can give oneself as often and as long as one likes.
- Private cost (MPC): refers to the cost of casino gaming chips needed to play the various casino games available including slot machines and table games such as roulette and baccarat, transportation and accommodation costs. Medical costs to

treat conditions related to physical health (eg. gastro-intestinal distress) as well as for psychiatric conditions (eg. preoccupation with casino gambling, feeling of loss of self-control).
- External Cost (MEC): refers to the cost imposed on third parties to play the various casino games available including family members and neighbours: the continued and increased frequency of casino gambling can cause hardship (emotional, physical and mental) to the family members and neighbours of the gambler.
• Figure 1 illustrates the divergence between marginal private cost and marginal social cost.
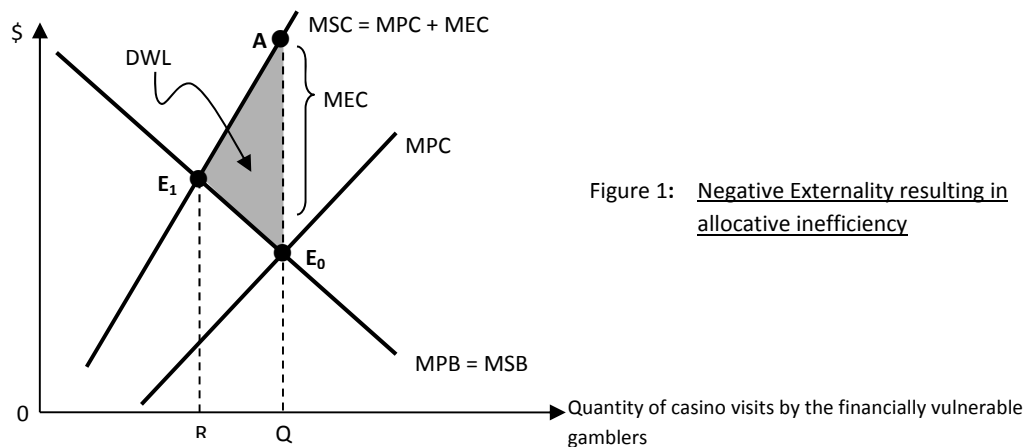
Figure 1: Negative Externality resulting in allocative inefficiency

Next, the student would have to show how the cap on the number of visits by financially vulnerable people could help to correct the market failure.
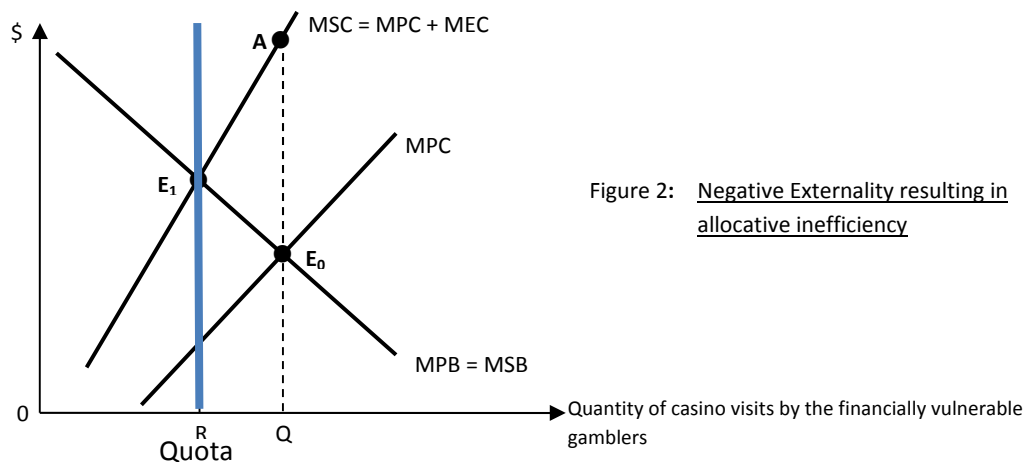
Figure 2: Negative Externality resulting in allocative inefficiency

Thus with the implementation of the quota, if the government were to be able to accurately place the quota at the quantity R, then the government would be able to force the financially vulnerable consumers to consume at where the socially optimal output is. The deadweight loss would also be eliminated.

Limitations of this policy are to be addressed as well in the answer.
   (i)   These limitations could be the quota not accurately set to the socially optimal level could either result in deadweight loss still present or the deadweight loss incurred due to loss of benefits from under-consumption.
   (ii) Problem with the classification of the financially vulnerable people (in this case, the income bracket of the people to be deemed as financially vulnerable).

(iii)   Not going to be well supported by people who are affected by this policy (government might lose popularity)

(iv)   These people might go overseas to gamble instead. So if the government objective was to reduce gambling among the people, it was only able to reduce gambling IN Singapore but not elsewhere.

Thus, the candidate should examine the objective of the government. It is stated in the question that the policies should be gauged based on tackling the gambling addiction in Singapore. Hence the evaluation should be concerned about the gambling problem in Singapore, and not a specific target group only.

Current policies:

1) The forming of the NCPG (National Council on Problem Gambling) and Helplines and Help services

Evaluation: A regulatory board to help implement policies for gamblers to seek help and provide assistance and resources for them.

Limitation: It is still deemed to be passive and thus would either require the family members of the gamblers or the gamblers themselves to identify their problem before help can be rendered.

2) **Casino exclusion services**

Evaluation: A ban is placed on the people who were either recommended by family members or by the gamblers themselves. Prevention of entry is imposed on the person identified thus would effectively stop the gambling addiction in Singapore for them. Limitations: It would be an issue of gambling in Singapore legal casinos that might be curbed but it is not possible to stop these people from gambling on casino cruises or illegal gambling dens. It is also only effective if the people at risk are accurately identified and these people are active in seeking help. There might be people who are at risk but tries to hide their addiction.

3) **$100 Casino entry levy**

Evaluation: The $100 levy would be effective in increasing the marginal private cost of gambling for the gamblers. Thus for the people who are less affluent, the $100 could effectively deter them from gambling in the casinos in Singapore.

Limitations: However, with the increasing affluence of the people in Singapore, the $100 might be deemed to be a small proportion of the income and also because gambling is an addiction, people may not be deterred by this policy.

4) **Education and Media Awareness**

Evaluation: The root cause of gambling addiction is not curbed by the above policies. With education and advertisements, the children and people might be able to see the negative impacts that gambling might bring to their loved ones and themselves. Hopefully they would be more aware of these negative externalities and thus either quit gambling or reduce gambling.

Limitations: It is a long term measure where the outcome would not be certain since it would depend on whether they are willing to accept the information and quit their addiction. Cost of the advertisements would also be high and this could mean opportunity costs for the government.

Conclusion would be that there are no "best" policies and in the preamble, it was already stated that the policies are meant to complement each other. Thus a combination of the policies used together would be able to cover more ground and hopefully have the greatest impact.

Mark Scheme

Level	Description	Marks
L3	For an answer that demonstrates **excellent knowledge about how the imposition of a cap works and** that the imposition of this new policy may not be the best solution to alleviate the social impact of casino gambling. At least 2 alternative policies should be discussed. **Excellent development and rigour** in economic analysis. Excellent knowledge when applying to the Singapore context with **good illustrative examples**	9-11
L2	For an answer that demonstrates **good knowledge** that the imposition of a cap may not be the best solution to alleviate the social impact of casino gambling. **Some development and rigour** in economic analysis. Good attempt in suggesting with elaboration on the use of at least 1 other policy. Evidence of sound knowledge when applying to the Singapore context. Max 7 marks if only one other policy is suggested and explained. Max 8 marks if two policies explained but both are in the similar category.	4-8
L1	For an answer that demonstrates **limited knowledge** that the imposition of a cap may not be the best solution to alleviate the social impact of casino gambling. Answer **lacks or shows limited application to Singapore context**. Some **conceptual errors** in the explanation, showing lack of understanding of the economic concepts.	1-3
Evaluation		**Marks**
E2	For a well-reasoned judgment on why the imposition of a cap may not be the best solution in alleviating the social impact of casino gambling,	3-4
E1	For a mainly unexplained judgment on whether the imposition of a cap is the best solution to alleviate the social impact of casino gambling.	1-2

2013 NYJC H1 Prelim Suggested Answers to Essays

4   (a)   Explain the likely causes of an appreciation of a country's exchange rate.   [10]

(b)   Assess the possible impact of an appreciation of a country's exchange rate on its economy.   [15]

Synopsis

The question is of the rather basic 'causes' and 'effects' type. It requires a good explanation of each of the causes of an appreciation of a country's e-rate. The assumption of a 'managed float' environment should be explicitly (or implicitly) made. Although not specifically asked for, some judgment should be made w.r.t. the most important or most likely cause.

In assessing the impact, the scope and limits of the issues addressed should be made clear. The impact could be limited to the KEIs (inflation, unemployment, growth, BoP) and both short term and long term effects should be examined. A judgment should be made w.r.t. the overall positive or negative effect.

Part a)

Intro	• Define exchange rates. • Outline how e-rates are determined.
(Px & Pm)	• Show how changes in Px affects the demand for a currency. • Sow how changes in Pm affects the supply of a currency.
(rel GPL)	• GPL↑ (UK) > GPL↑(USA) ⇨ [Pr gds (UK)/ Pr gds (USA)] ↑ ⇨ Dd £↓ ⇨ (US$/£) ↓
Relative Income	• When a c'ty's income ↑v ⇨ v its Dm↑ ⇨ SScurrency↑ ⇨ (US$/£) ↓
Interest rates	• relative i/r ⇨ capital flow ⇨ Dd & SS (of currency) ⇨ Δ e-rates
Other causes	• Govt Expenditure (e.g. military expenditures) • Govt Policy (E-rate management Policies) • Govt Borrowing (incurring or servicing of external debs)
Conclusion	• Comment on the relative importance of these causes and the conditions underwhich their impact would be greatest.

Marking Scheme

Part a)

L1	Shows some knowledge of the causes of an appreciation. Unable to explain the mechanisms through which the causes work.	1-3m
L2	Shows an appreciation of how e-rates are determined. Understands the major causes of an appreciation. Is able to explain (not always accurately) the mechanisms through which the causes work. A good theoretical answer.	4-6m
L3	Is able to apply the explanations of the causes to contexts of his/her choosing. Is able to evaluate the relative importance of the different causes explained.	7-10m

Part b)

Intro	•Outline the indicators examined, growth, unemployment , inflation & BoP
Impact on AD	•(US$/£)↑ ⇨ (Px/Pm)↑ ⇨ Vx ↑ (Magnitude of the increase would depend on PEDx) , Vm↓ (PEDm would determine if Vm actually increases or decreases, assuming that PEDm>1)⇨ AD↑ •(US$/£)↑ ⇨ FDI↓ ⇨ AD↓ (NOTE: the effect of an rising e-rate and a high e-rate is very diff.) •(US$/£)↑ ⇨ (Px/Pm)↑ ⇨ Vx ↑ , Vm↓ ⇨ AD↑
Impact on AS	• (US$/£)↑ ⇨ Pr Md Raw mat↓ ⇨ CoP↓ ⇨ AS ↑ (shifts downward) [note: productive capacity is not affected) •(US$/£)↑ steady ⇨ Investor confidence ↑ ⇨ FDI ↑ ⇨ AS ↑ (shifts rightward in the LR)
O'all impact	•Current state of the economy •Openness of the economy
Conclusion	•Assessment of the possible impacts. •Most or least impactful.

L1	Has some knowledge of the impacts of an appreciation on the KEIs Largely unexplained links statements rather than explains.	1-4m
L2	Is able to identify key indicators to examine; Inflation, Unemployment, Growth & BoP. Explains, but not always accurately, the mechanism (channels) through which an appreciation impacts each of the indicators. Makes an assessment of the relative impacts, but is largely theoretical without much application to any contexts.	5-7m
L3	Clearly explains the mechanism through which an appreciation impacts each of the indicators. Makes an assessment of the impacts in different contexts.	8-11m
E1	Comes to a judgment w.r.t. the most important impact. (Conditional) OR is ranks the impacts in some form or other.	1-2m
E2	The judgment is supported by good reasoned analysis.	3-4m