

The cornerstone of the Singapore government's philosophy towards public housing lies in the Home Ownership Scheme introduced in 1964. It involves the provision of fairly generous and broad-based subsidies to ensure affordable and thus widespread home ownership.

Source: Lee Kuan Yew School of Public Policy, 2014

- (a) Using appropriate examples, explain the key differences between a merit good and a public good. [10]
- (b) Discuss the determinants of a government's decision to intervene in the market for public housing. [15]

A merit good and a public good can be differentiated by characteristics of non-rivalry and non-excludability. As a consequence, the different implications of the characteristics on the level of government intervention can also be a distinguishing factor between the two goods.

Merit good is a private good which is rival in consumption and excludable. It is defined as a good which is deemed socially desirable by the government but under-consumed and it is mainly caused by disregard of positive externalities and ignorance of private benefits while public good is a good which displays characteristics of non-rivalry and non-excludability.

The first key difference is about non-rivalry. Non-rivalry means that the consumption by an additional consumer does not diminish the amount available for consumption by others. As such, this implies that a good which is non-rival will have a marginal cost of serving an additional user being zero. With zero marginal cost, allocative efficiency is achieved only when the good is provided to all who want it at no charge ( $P=MC=0$ ). At a zero price, the private markets will not produce the goods and any non-zero price would discourage some users from enjoying the good, thereby causing a reduction in society's total welfare. For instance, a public good like national defence has the characteristic of non-rivalry that one more resident into the country will not diminish the amount of protection that the people currently in the country enjoy.

While a public good is non-rival in consumption, a merit good is usually rival in consumption. This means that the consumption by an additional consumer diminishes the amount available for consumption by others. Therefore, the marginal cost of serving an additional consumer is not zero. With non-zero marginal cost, allocative efficiency is thus achieved when the good is provided at non-zero price (i.e.  $P=MC>0$ ). Given that producers would only be willing and able to sell at a price that is at least equal to their marginal cost of production, when left to the market forces, profit-seeking producers will be able to charge for their services, meaning the free market is able to produce it. For example, a merit good like healthcare is rival in consumption as one more patient seeing the doctor will deprive another patient from healthcare services at the same time, given the finite amount of resources such as doctor's consultation time.

The second difference is about non-excludability. Non-excludability means that it is prohibitively expensive or impossible to block non-payers from enjoying the good. A public good is non-excludable while a merit good is excludable in consumption. The problem of free-ridership therefore exists in the context of a public good due to non-excludability. Since non-payers can also consume the good, no one would be willing to pay for the good. At the same time, as no profit-seeking producer will be willing to produce a good at a zero price, the free market will not produce the good, even though consumers want the good. For example, it is impossible to block a non-payer from enjoying the protection that national defence provides.

On the other hand, a merit good is excludable in consumption as it is possible to exclude any non-payers from enjoying the benefits of consumption. Producers will therefore be able to segregate consumers into payers and non-payers. As non-payers do not get to consume the service, people would be willing to pay for the good as the problem of free-ridership is non-existent. For example, a patient will not be granted access to a doctor if he refuses to pay for the services, implying excludability in the healthcare market, which is a private good.

These differences lead to the different extent of market failure. As mentioned earlier, because of the implications of non-rivalry and non-excludability, a public good is a case of complete market failure and there will be zero production by the private market even though there is demand for it. As such, it will require full government intervention in order for the good to be produced. On the other hand, the presence of positive externalities and imperfect information will mean there is a need for some degree of government intervention to shift the consumption level from  $Q_m$  to  $Q_s$  as there will be under-consumption in the market.

For example, healthcare generates positive externalities. When employees actively go for health check-ups at regular periodic periods, the private benefits will be about getting to detect early their personal medical problems and thereby allowing them to go for appropriate treatment. At the same time, they generate positive externalities (external benefits) for third parties like the employers and co-workers. The employers benefit from cost savings as costs of cover, overtime costs and training costs are reduced while co-workers benefit from the higher productivity when their fellow workers are fit and well.

In addition, a merit good is also caused by imperfect information. In the context of healthcare, due to complex information and ignorance, consumers might not know the full extent of the benefits of healthcare services and this result in under-consumption of healthcare services. As such, some form of government intervention might be required to correct the under-consumption.

As such, a public good will result in a complete market failure with no production from the free market while a merit good will result in a partial market failure with under-consumption.

Level	Description	Marks
L3	For an answer that uses appropriate analysis to i) explain the differences of public good and merit good through the characteristics of non-rivalry and non-excludability and included the respective implications. ii) ALSO made use of appropriate examples from the real world to illustrate understanding of the two characteristics.	8-10
L2	A descriptive explanation of the characteristics of non-rivalry and non-excludability and the required underlying implications.	5-7
L1	Knowledge of what is meant by public good and merit good and/or the underlying implications of the characteristics.	1-4

b) Discuss the determinants of a government's decision to intervene in the market for public housing. [15]

The governments around the world intervene in the market for public housing because the price mechanism in an unregulated market fails to achieve a socially optimal allocation of resources and market failure arises. Specifically, public housing is residential properties created by the Housing Development Board of Singapore to accommodate the majority of the citizens of the country. It is a private good that has positive externalities and thus, it can be provided by the private market but there will be under-allocation of resources to the industry. As such, government intervention will be advocated and there are a few determinants that will affect a government's decision on the degree and type of intervention in the market for public housing. The government often have to weigh the costs and benefits of intervention and they will only intervene if the benefits outweigh the costs of intervention. The considerations also hinge on the conditions and characteristics of the country as well.

### **Degree of MEB (Benefit)**

One of the important determinants of government's intervention is the degree of marginal external benefit in public housing. If the size of MEB is huge, then a significant form of intervention like a grant or subsidy might be required to deal with the under-consumption. There are positive externalities of public housing where the creation of cohesive communities helps to support national objectives such as maintaining racial harmony and stronger family ties. Third parties like the community as a whole and citizens in the neighbourhood will benefit from the peaceful surroundings and reduction in social unrest when more people buy public housing for private benefits to secure a roof above their heads. With reference to figure 1, due to the presence of MEB, MPB diverges away from MSB. As such, the level of consumption by the unregulated market is given by  $MPB = MPC$ ,  $Q_m$  and it is lower than the socially optimal level of consumption which is given by  $MSB = MSC$ . There is under-consumption of public housing and it results in a deadweight loss of area ABC.

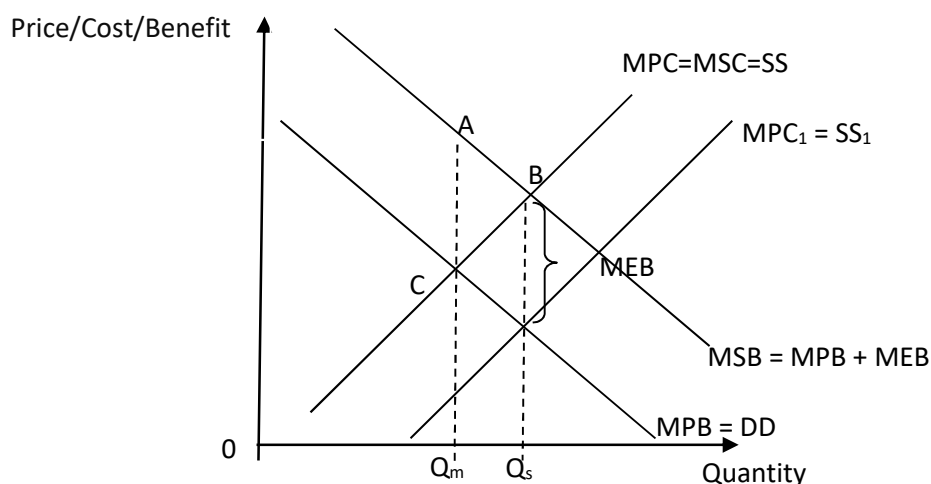


Figure 1: Market for Public Housing

Due to the under-consumption in public housing, there is a need for the government to intervene to increase the consumption of housing. The degree of market failure in the market of public housing will thus decide how much government intervention is required.

### **Relative effectiveness of existing policies for the public housing market**

The next factor the government has to consider is whether they have existing and alternative feasible plans to correct the problem of under-consumption. Government will intervene in two main methods, to increase the demand for affordable housing and to increase the supply of housing at the same time. For example, the Singapore government has implemented a compulsory savings scheme in Singapore, namely the CPF savings scheme, where citizens are expected to deposit a portion of their salary into an account which can only be utilized for property purchases. This inevitably increases the demand for public properties and the level of consumption increases from  $Q_m$  to  $Q_s$  as citizens now find themselves more willing to spend on properties since they can only use these savings on purchases of houses.

In addition, the opportunity cost of these subsidies could also be increasing, especially given today's economic climate which is full of uncertainties and the increasing need to relook into the healthcare expenditure given an ageing population. The government might be facing a budget deficit given much financial outlay to revive the economy given negative economic growth in recent years or uncertainties due to gloomy economic outlook and this will limit the government's financial ability to intervene in the housing industry. Government would have to weigh the costs and benefits carefully and prioritise their economic objectives. If it is more urgent to take care of the healthcare aspects due to the ageing population, then the government might have to reduce their amount of intervention in the housing market. **Therefore the Singapore Government needs to consider her budget position and only commit the amount of expenditure on housing if they can afford it on a sustainable level, since the citizens would have expected prices for public housing to be stabilized with the government's help of financial subsidies all this while. The government also has to relook at the contribution rate of the citizens towards their CPF accounts and examine whether Singaporeans are finding it hard to afford the houses, especially given the rising rate of structural unemployment in Singapore as we continue to restructure our economy towards a knowledge-based economy.**

### **Conclusion**

**It also depends on the characteristics of the economy. If the country has a high level of income inequity, it might be crucial to intervene so that the poor can also have a roof above their heads. The poor are willing but financially unable to afford basic forms of housing so the demand will be lower than what it could be, resulting in under-consumption. It is also the government's aim to ensure affordable public housing so that most Singaporeans own their own residential property so that they have a higher sense of ownership in the country. By supplementing the supply of houses in the country, the prices of house will decrease and this also helps to address the income inequality in an economy. Therefore, the economic climate projected into the future and level of income inequity of the country have a huge bearing on the government's decision too.**

**Whilst government should step in to provide public housing, it should also regulate and allow the development of private housing developers so as to complement its efforts. This would keep the housing market contestable and ensure a variety of housing options for potential home-buyers.**

Level	Description	Marks
L3	For an answer that uses appropriate analysis to explain the determinants based on cost-benefit approach which includes why government might need to intervene in the public housing market and also considered the degree of effectiveness of the interventions.	8-10
L2	For an answer that gives a descriptive explanation of the costs and benefits that government consider when intervening in the public housing market.	5-7
L1	For an answer that shows some knowledge of the costs or benefits that governments consider when deciding to intervene in public housing.	1-4
E3	For an answer that uses analysis to support an evaluative appraisal of the determinants	4-5
E2	For an answer that makes some attempt at an evaluative appraisal of the d	2-3
E1	For an unexplained evaluative statement	1