**Patented Drugs Price Cap – Microeconomics IA**

The government in India has decided to regulate the prices of patented drugs, in an attempt to provide relief to impoverished patients suffering from ‘life-threatening diseases’. This could lead to a variety of effects which may create allocative inefficiency in India’s economy. The following graphs explain the effects of price ceilings.

Pe

Pc

Q

Qs

Qe

Qd

P

Welfare loss

S = MC

D = MB

a

b

ce

Figure 1

Pe

Pc

Q

Qs

Qe

Qd

P

Shortage = excess demand

S

D

Figure 2

Figure 1 shows that, by imposing a price that is below the equilibrium price, a price ceiling results in a lower quantity supplied and sold than at the equilibrium price. The price ceiling is shown in the diagram as Pc and this price corresponds to quantity Qs, which is less than equilibrium quantity Qe that suppliers would produce at equilibrium price Pe. This means that the price ceiling leads to a larger quantity demanded than is supplied; since at Pc consumers demand quantity Qd, whereas they are only supplied with Qs. Price ceilings therefore cause inefficient allocation of resources because they inadvertently lead to shortages. Positive consumption externalities relevant?

Figure 2 shows the negative welfare impacts of price ceilings. At equilibrium price, producer surplus is equal to the areas a+b+c. Consumer surplus is equal to the area highlighted in red. These two areas are equal and MB = MC, therefore allocative efficiency is achieved without any price controls. However, with a price ceiling at Pc, only quantity Qs is produced and consumed. Consumer surplus is therefore becomes a+b, while producer surplus is only equal to area c. Total social surplus is therefore a+b+c, as opposed to a+b+c+ red area. The red area of social surplus is lost because of the price ceiling: this is known as welfare loss, or the loss of social benefits because of the price ceiling. Because of this welfare loss, allocative efficiency is no longer achieved since MB > MC: the marginal benefit users get from buying the product is greater than the marginal benefit of producers supplying the product. There is therefore an underallocation of resources towards the good’s production. Good

A price ceiling being placed on patented drugs would have an affect similar to those shown in the diagrams. Though drugs would be more affordable and the ‘complaints of overpricing’ may lessen, producers would have less of an incentive to supply patented drugs, since they receive less marginal benefit from supplying the drug at the capped price than at the equilibrium price. They would therefore supply less of the drug, which would lead to a shortage of patented drugs.

There are several drawbacks to price ceilings. Apart from the welfare loss experienced by society, shortages of a good can lead to non-price rationing, such as queuing or the distribution of coupons. This is seen as an ‘unfair’ method of distribution and it does not solve the problem that some people will not get their patented drugs, which are a merit good. Underground markets may rise, selling the patented drugs, but they may exploit the lack of supply by selling at very high prices. These underground markets would defeat the purpose of a price ceiling, which is to set a maximum price for a good so that it is more accessible to all. The implications of non-price rationing and underground markets are negative: these systems of distribution of drugs are unfair or likely to lead to crime.

In order to combat the negative effects of price ceilings, the government could provide a subsidy for producers of patented drugs as an incentive for them to supply enough of the good for the market demand. They would have to use tax revenue for this subsidy, so this may also not be a good solution if taxes have to be hiked, as this would leave consumers worse off which would be self-defeating. For taxes to not be increased, money would have to be shifted from other public services to enable the employment of the subsidy. This could be useful if drugs are absolutely necessary, but damaging to the economy otherwise.

In conclusion, I believe setting price ceilings on patented drugs would lead to allocative inefficiency and therefore be a self-defeating policy, unless it is combined with a subsidy which allows for sufficient production of patented drugs. Therefore, India should provide a subsidy for the drugs which combat ‘life threatening diseases’, but not implement a price ceiling for other patented drugs.

Good Evaluation

Portfolio (SL/HL) -

Criterion A: Diagrams

• This criterion assesses the extent to which the student is able to construct and use diagrams.

Level Descriptor

0 The work does not reach a standard described by the descriptors below.

1 Relevant diagram(s) are included but not explained, or the explanations are incorrect.

2 Relevant, accurate and correctly labelled diagram(s) are included, with a limited explanation.

3 Relevant, accurate and correctly labelled diagram(s) are included, with a full explanation.

Criterion B: Terminology

• This criterion assesses the extent to which the student uses appropriate economic terminology.

Level Descriptor

0 The work does not reach a standard described by the descriptors below.

1 Terminology relevant to the article is included in the commentary.

2 Terminology relevant to the article is used appropriately throughout the commentary.

Criterion C: Application

• This criterion assesses the extent to which the student recognizes, understands and applies economic information in the context of the article.

Level Descriptor

0 The work does not reach a standard described by the descriptors below.

1 Relevant economic concepts and/or theories are applied to the article.

2 Relevant economic concepts and/or theories are applied to the article appropriately throughout the commentary.

Criterion D: Analysis

• This criterion assesses the extent to which the student can explain and develop appropriate economic theories and/or concepts in the context of the article.

Level Descriptor

0 The work does not reach a standard described by the descriptors below.

1 There is limited economic analysis relating to the article.

2 There is appropriate economic analysis relating to the article.

3 There is effective economic analysis relating to the article.

Criterion E: Evaluation

• This criterion assesses the extent to which the student synthesizes his or her analysis in order to make judgments that are supported by reasoned arguments.

Level Descriptor

0 The work does not reach a standard described by the descriptors below.

1 Judgments are made that are unsupported, or supported, by incorrect reasoning.

2 Judgments are made that are supported by limited reasoning.

3 Judgments are made that are supported by appropriate reasoning.

4 Judgments are made that are supported by effective and balanced reasoning.

Criterion F: Rubric requirements

• This criterion assesses the extent to which the student meets the five rubric requirements for the

complete portfolio.

–– Each commentary does not exceed 750 words.

–– Each article is based on a different section of the syllabus.

–– Each article is taken from a different and appropriate source.

–– Each article was published no earlier than one year before the writing of the commentary.

–– The summary portfolio coversheet, three commentary coversheets and the article for each

commentary are included.

Level Descriptor

0 The work does not reach a standard described by the descriptors below.

1 Three rubric requirements are met.

2 Four rubric requirements are met.

3 All five rubric requirements are met.