## Webnote 141

# Market failure is a key concept

- Examples include:
- 1. externalities
- public goods merit goods/ demerit goods
- 3. labour mobility
- 4. imperfect competition (syllabus 1.5 HL)
  monopoly
  oligopoly
  monopolistic

Note: The MSB/MSC is a <u>4 stakeholder</u> diagram. It represents the Firm, Consumer, Government and Society.

The market diagram (Supply and demand) primarily represents 3 stakeholders namely the Consumer, Producer and the Government. This is the key difference between the diagrams. Otherwise they are similar e.g. when a government indirectly taxes a market then supply shifts upwards to the left. MSC will also shift upward to

Costs + Benefits

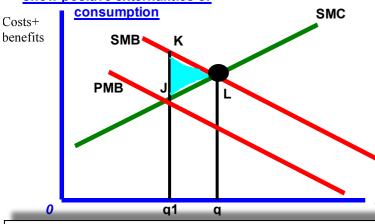
Diagram 1: SmB and SmC to show negative externalities of production

SMB

PMC

A C PMC

Diagram 2: SmB and SmC to show positive externalities of



<u>Welfare loss</u> = a non optimal allocation of resources where MsB is not equal to MsC. <u>This results in over/under consumption /production.</u>

SYLLABUS REFERENCE 1.4<sup>1</sup>: addressing market failure

Resource Allocation applying the concept of welfare economics: A solution to Market Failure using *Social Costs* +

Social Benefits

# 4 Steps to remember to draw the diagrams for market failure?

- 1. Every time draw MsB + MsC. Social optimum is where these lines intersect. See black in diagrams 1+2.
- 2. Draw the welfare loss triangle as it will be easily seen as the angle between the two social lines. The third line then is drawn on one of the two remaining points of the triangle depending on whether it is a 'production' or a 'benefit' line.
- 3. Decide whether the third line is a benefit or cost line i.e. is the story about consumption/benefit ( PMB) or production/cost (PMC)? See 4 below.
- 4. Draw the third line using the following guidelines:
  - Is it over / under consumption or production? "Over" is right of social optimum. Under is left.
  - Is it a under (e.g. merit) or over (e.g. demerit good )?
  - Does society want more or less of the consumption/production?
  - E.G. If government wants more consumption then the diagram should be diagram 2 below showing 'under-consumption' or positive externalities of consumption. Markets under consume health care e.g. public health vaccine to protect public health
  - Which triangle for welfare loss do you shade? It is always the Angle between SmB and SmC = welfare loss e.g. abc, see web 252
  - Practice this so your diagrams are always correct!

## **COMMENT: DIAGRAM 1**

- Q is the socially efficient level of output
- Market supplies q1
- Overproduction = area abc
- This is a welfare loss or cost to society of the market failure.
- Welfare loss is a socially inefficient allocation of resources
- Social optimum is where MsC=MsB

### **COMMENT: DIAGRAM 2**

- Q is the socially efficient level of output
- Market only supplies q1
- Under-consumption = area of jkl
- This is a welfare loss to society (see webnote 252 for welfare loss)

#### **IB Testing Focus:**

IB HL 2 paper Nov 2003: Q2 Focus is on government attempts to control tobacco Click on 'Assessment' in the Index and select HL 2

Task 1: Explain the key differences between diagram 1 and diagram 2 above.

source: grant + young. See also Stanlake 'Introductory Economics' chapter 24