


SYLLABUS REFERENCE 2.8¹: The BLUE BOX below will help you get your externalities diagrams correct every time.

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 **YELLOW**  in diagrams 1- 4 on W-289.
2. Draw the welfare loss triangle as it will be easily seen as the angle between the two social lines. (Over or under the optimum social output level). 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!**

¹ source: grant + young. See also Stanlake ' Introductory Economics' chapter 24


BLUE BOX

.....The short version

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Steps to remember to draw the diagrams for market failure?

1. Every time draw $MsB + MsC$.

Social optimum is where these lines intersect. See YELLOW  in diagrams 1- 4 on W-289.

2. Draw the welfare loss triangle.

It will be easily seen as the angle between the two social lines. (Decide whether you are drawing over or under the optimum social output level).

3. Draw the third line.

Deciding 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 above for more details on this. Once you have decided whether it is a production or consumption problem then the third line can only be placed at one point on the triangle.