**Demerit goods: Tobacco**

**Necessary equipment:**

Flipchart paper and pens

Projector/IWB

By the time demerit goods arises as a topic by itself, students will already be aware of the idea of external costs in consumption and that in a free market, cigarettes will tend to be overconsumed relative to the optimal level.

This exercise is an attempt to put some context on the subject by looking at the tobacco sector to give a sense of some of the external costs and the complex nature of the topic.

**One way of starting** is to see what sense the students have of how many people smoke, who smokes and so on. Pair them up and ask them to agree:

• what proportion of the UK population smokes;

• how does that vary by income level (roughly) – are the poor or rich more likely to smoke;

• how does it vary by age – are the young or old more likely to smoke;

• how does it vary by education level – are educated people or less educated people more likely to smoke.

Then you can show them the powerpoint with some recent data – some of this is from the US, but it is broadly applicable to the UK. You could ask them why they thought things might be different (if they did) and why they think the patterns are as they are.

**Next** break the students into groups of around four and give some groups the document containing tobacco industry data (from a pro-smoking pressure group) and the other groups the two documents from ASH (an anti-smoking pressure group).

<http://www.the-tma.org.uk/wp-content/uploads/2014/08/Cogent-TMA-Factsheet-UK.pdf><http://www.ash.org.uk/files/documents/ASH_95.pdf><http://www.ash.org.uk/files/documents/ASH_93.pdf>

Ask each group to produce a poster summarising the key arguments either in favour or against the tobacco industry and then each group can present their key points or have a short debate based around what they have found out and their own knowledge. You can put the best ones up on the wall.

**Finally** you can get them to think about possible ways to reduce smoking further.

Firstly you could ask them in pairs to work out and draw a supply and demand diagram that illustrates the problem (demand too high relative to the optimal level (see appendix 1). And then ask them to come up with some possible solutions.

You can go around getting them to explain their ideas and you can write them on the whiteboard into one of four boxes:

• tax/pricing (e.g. increase excise duties, minimum pricing);

• subsidise alternatives (nicotine patches, electronic cigarettes);

• legislate (banning smoking in private cars, putting cigarettes out of sight of children);

• inform (better education in schools, tougher packaging restrictions).

These four categories are good ways of getting students to suggest solutions to a wide variety of market failures (not just demerit goods – this is a good template for solutions generally). If they can find one from each category, then their solutions will tend to be quite diverse.

These solutions can then form the basis of a subsequent lesson on the evaluation of solutions to

demerit goods.

Appendix 1:

This is a simple diagram (in this case based on the idea that people smoke because of information asymmetry, but it can be adapted): P

P1

Pace

S

without information

with information

0 Q1 Q Quantity

This is a more complex diagram with welfare loss etc. (not required for AS level):

P

Pm

Popt

S=MPC=MSC

welfare loss

size of externality

MSB D=MPB

0 Qopt Qm Q