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The Tobacco Industry- A Failing Market and Solutions
Applied.

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Introduction

In 2021, the Tobacco market made 17,478 in million GBP and is rising currently predicted to rise to 18,010 in million GBP by 2025 in the United Kingdom (Statista,2021). The manufacturing of Tobacco doesn't only impact users by causing eight-million deaths a year globally, but it also impacts the environment humans rely on by causing deforestation, the use of fossil fuels, and dumping or leaking of waste products into the natural environment (ash.org.uk, 2021). Due to the Tobacco manufacturing industry impacting not only the environment but also the health of the public it is important for the government to take precautions to minimise the risks to the environment and cost to society.

This report will include an assessment of solutions on how to combat negative externalities of pollutant produced through consumption of the Tobacco industry within the United Kingdom and will analyse how effective the governments measures have been. The fatal risks the Tobacco industry is doing to society that is related to health concerns produced by smoking will be covered and the detrimental risk of toxic pollutants will be explored to understand how damaging smoking is to societies and their environments.

An analysis will be made of the tobacco industry by using evidence and real figures of externality costs from health and environmental damages. This will be shown through using basic economic diagramming to provide a clear understanding on the market failure.

The tobacco industry will be analysed after the solutions have been implemented to gain an insight on whether the solution has reduced people from smoking and purchasing from the tobacco industry. This analysis will be substantiated using reliable academic sources such as articles, government websites, statistical websites, books, journals, and can also refer to schematic diagrams.

Market Failure of The Tobacco Industry.

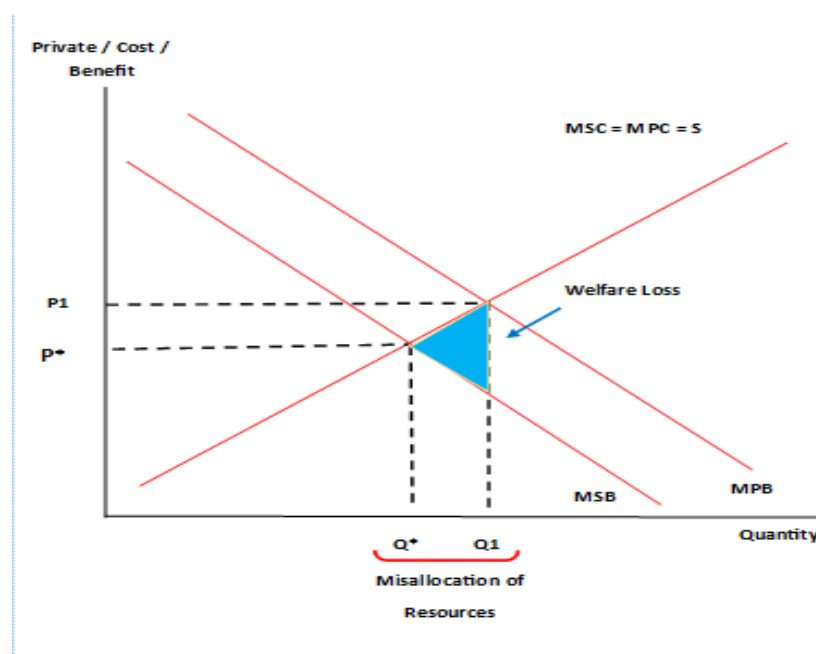
In economics, “market failure” is a situation in which market forces leads to reduction in the welfare of society (The Health Foundation, 2020). For example, whilst manufacturers create pollution that is harmful towards society, the manufacturers do not pay for the consequences created from the pollution. Without a mechanism to force producers to pay, there would be little incentive for them to limit or modify their polluting activities.

Tobacco is one of the greatest public health threats the world has had to face, with it killing more than eight million people each year worldwide. Seven million deaths are responsible from direct use of tobacco while around 1.2 million are a result of non-smokers being exposed from second hand smoke. There is no safe level of exposure to second-hand smoke, which is responsible for more than 1.2 million premature deaths each year and serious cardiovascular and respiratory diseases. Nearly half of children regularly breathe air polluted with second hand smoke in public places and sixty-five thousand children die each year from diseases caused by it. With smoke-free laws they protect the health of not only smokers but also non-smokers and are popular because they do not harm business and encourage smokers to quit their bad habit. More than 80% of the world’s 1.3 billion tobacco users live in low- and middle-income countries, where the burden of tobacco-related morbidity and mortality is greatest. Tobacco use contributes to poverty by redirecting household spending from the basic life necessities to tobacco use (World Health Organization, 2021). In 2021 it was reported that 14.7 percent of citizens are reported for smoking regularly in the United Kingdom (Statista,2021).

The biggest impact of smoking on the environment is deforestation. This happens both to provide tobacco soil and to provide the wood that is burned in the combustion of many tobaccos. In total, an estimated 200,000 hectares of land are cleared each year to pave the way for tobacco cultivation (Tobacco Free Life, 2016). Second-hand smoke is also a big impact on the environment as it impacts air quality. There is abundant evidence from a variety of sources shows a marked improvement in air quality when smoking is banned. For instance, when New York enacted a state-wide smoke-free law, fine particle levels in the 20 locations recorded a reduction by eighty-four percent, and many other locations around the world reported similar results (Tobacco Free Life,2016).

Tobacco is a drug to blame because they have negative external effects. They are considered socially undesirable. Negative externalities refer to costs incurred to third parties that are not considered by the participants of the activity. People who smoke only take into consideration the private costs such as the price of cigarettes and smoking caused health problems and the private benefits such as the satisfaction and addiction to Nicotine. However, the smoker will not consider the negative externalities that is created from smoking such as health problems, cost towards society to provide healthcare for smokers with smoke related problems. The social costs of the activity are separate costs borne by the smoker as well as external costs borne by third parties. Negative externalities will lead to a divergence between private and social costs. In the presence of negative externalities, the social costs will be higher than the private costs. Market failure is to occur because negative externalities are undervalued by the pricing mechanism. If cigarettes were offered on the open market, the social costs of smoking would exceed the private costs. A private optimum occurs at Q_e where the PMB (the benefit to the individuals of smoking the last unit of cigarette) is equal to the PMC (the cost to the individual smoking last unit of cigarettes). The social efficiency level is where $SMC = SMB$, i.e., at output Q . So too many scarce resources are devoted to smoking. There will be overconsumption of tobacco because society values a unit of excess tobacco less than it costs society to produce it. The shaded area represents the loss of welfare to society due to this over-allocation of resources. Society could be better off if current tobacco levels were reduced to socially effective levels (JC ECONOMICS.COM, 2018).

Figure 1: Negative externality of Cigarette Consumption



Although the negative externalities of cigarette usage are thought to be harmful to society, the marginal benefit to the consumer outweighs the cost to society. Figure 1 above is a diagram demonstrating the negative externality of smoking, there is a discrepancy between the marginal social benefit and the marginal private benefit which equals supply. The marginal private benefit is opposite the marginal social benefit, and private optimum is where MPB is equal to MPC which is labelled as Q1 and P1, and there is a social optimum where MSB = MSC and is labelled as P* and Q*. There is a market failure as there is an overconsumption of products with misallocation of resources between Q* and Q1. When there is a misallocation of resources the market isn't doing their job properly and society is missing out to the loss of welfare, and the loss of welfare triangle will point to the social optimum.

Methods to improve market failure

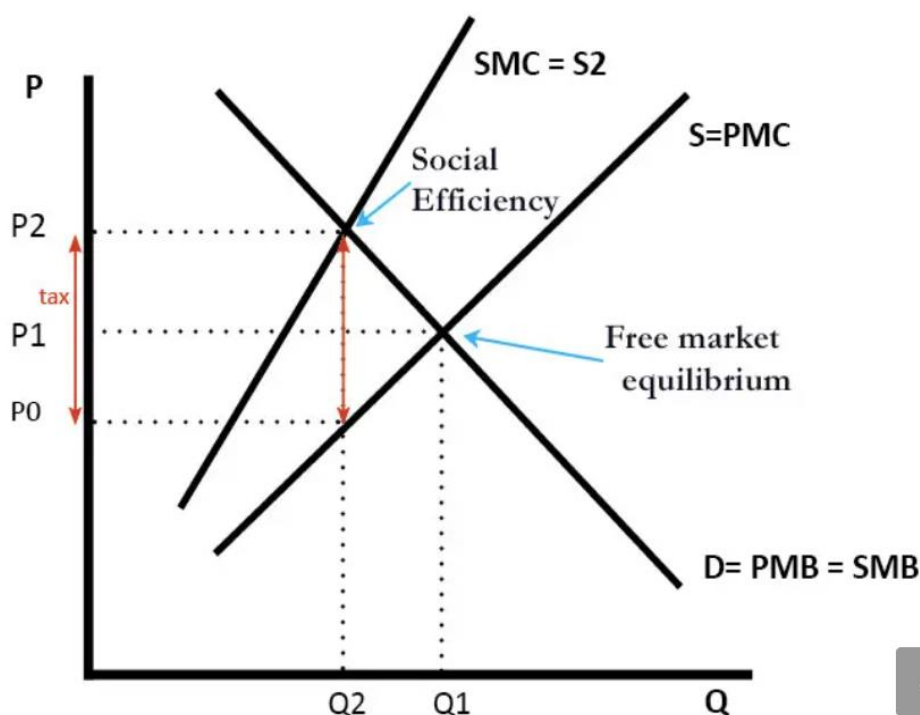
Solution one – Taxation

Taxes are well known for influencing the behaviour of businesses and consumers through influencing the cost of specific goods and services. Some taxes are aimed to diminish the quantity of a product consumed. For instance, the high rate of tax imposed on cigarette products. Or the nature of products such as the high rate of tax imposed on tobacco products. Taxes play a crucial part in redistribution as well. Since November 1993 to November 1999, there was an agreement to raise tobacco charges in real terms every year, initially by at least three percent on average and then by at least five percent on average starting in July 1997. Since May 20, 2017, the excise duty on cigarettes has been set at the higher of the following two options:

- The exact great British pound per one-thousand sticks plus 16.5 percent of the retail price.
- Or the Great British Pound per one-thousand sticks minimum excise tax (Gov,2022).

Therefore, one of the solutions implemented is an indirect sales tax to reduce consumption. Taxes on terrible externalities are supposed to make consumers / manufacturers pay the overall social price of the good. This reduces intake and creates an extra socially green outcome. If an excellent has a terrible externality, with out a tax, there could be over-intake (Q1 Wherein $D=S$) due to the fact human beings forget about the outside costs.

Figure 2: Taxes on Negative Externalities

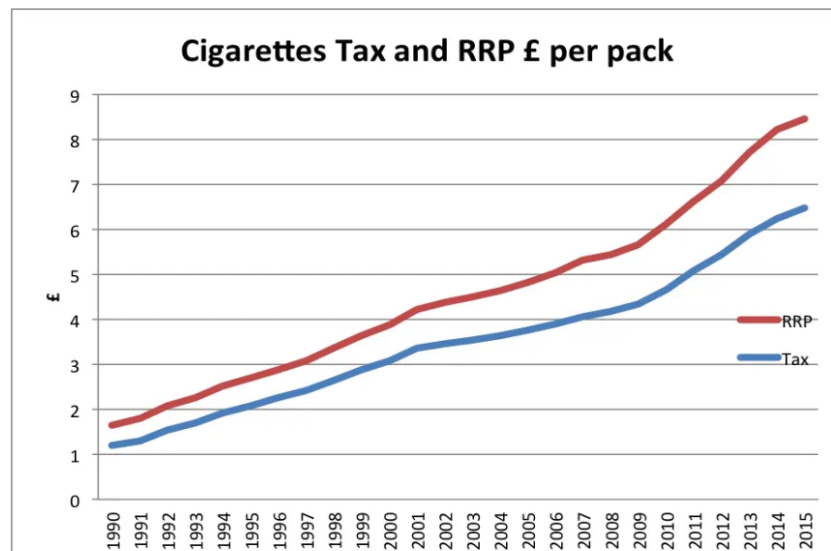


Goods should be taxed at the rate of marginal external costs. In other words, consumers will pay the full amount of marginal social costs. Taxes allow you to internalize harmful effects. After the tax is introduced, the production of goods will decrease from the first quarter to the second quarter. Q_2 is socially efficient because at this level, social marginal benefit (SMB) = Social marginal cost (SMC).

The advantages of the taxes are it provides incentives to reduce the negative externality such as pollution. Taxes increase government revenues. It can be spent on alternatives such as public transport. Alternatively, you can use tax revenues to address issues related to externalities. Tax increases lead to lower demand, but this may be a minor impact as demand is not price elastic. People are addicted and nothing is close to it. Cigarettes is a negative product, so consumers may underestimate the cost of smoking. They ignore the damage to their health. This is one of the reasons why people try to quit smoking. Also, smoking has many negative externalities with passive smoking, estimated to cost £1.5 billion for the NHS), so social costs are higher than the current price, you can increase social efficiency by having smokers pay the true social costs.

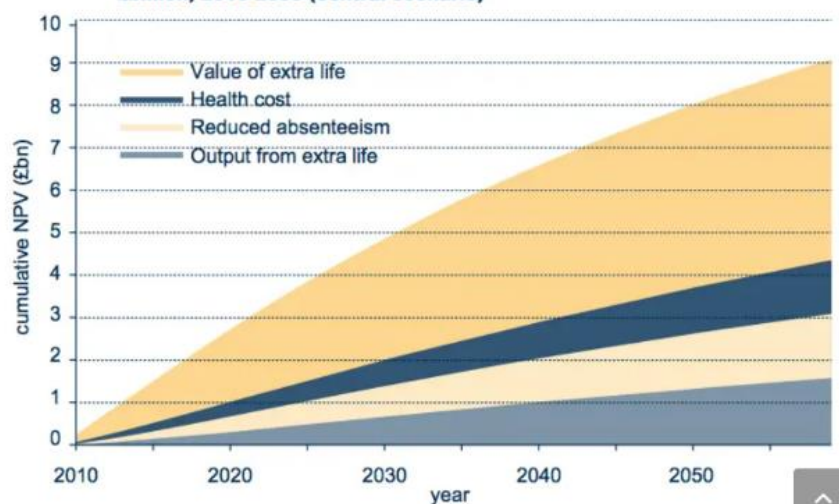
There is evidence that higher tobacco taxes have helped reduce demand.

Figure 3: Price of Cigarettes in the United Kingdom



In the United Kingdom, taxes make up seventy-seven percent of the price. Tobacco taxes are raising significantly faster than inflation. Tobacco tax will bring an estimated £10 billion in tax revenue to the government in 2014/15.

Figure 4. Cumulative discounted benefits from tax increase, £billion, 2010-2059 (central scenario)



The ASH report above suggested that tobacco taxes can lead to significant welfare improvements. Low smoking rates improve life expectancy and reduce the amount of time lost due to absenteeism.

Solution two – The government setting up negative advertising campaigns and standardized packages

The second solution is for the government setting up negative advertising campaigns and standardized packaging to prevent and discourage smokers from purchasing and using tobacco. The government has created such campaigns such as Stoptober, where on the first of October the government encourages smokers from the United Kingdom to participate in the other 2.3 million people participating in smoking cessation campaigns. Stoptober is based on a study that smokers who have been quitting smoking for twenty-eight days are five times more likely to quit smoking forever. The campaign was first launched in 2012, when one in five adults (19.3%) smoked. Since then, it has dropped to one in seven (13.9%) within the United Kingdom (Gov.uk, 2021).

The Stoptober campaign also offers a variety of free smoke quitting tools, which includes NHS quit smoking app, Facebook messenger bot, Stoptober Facebook online community, daily emails and SMS, online personal quit plan helps people find a combination of support. Expert support from local smoking cessation services and smoking cessation resources.

Packaging

Standardized cigarettes pack, also known as a plain pack, is a pack that has the attractive and promotional aspects including logos and graphics removed and the appearance of all cigarette packs on the market standardized. This includes the shape and colour of the package, as well as the font and colour of all text. The standardized package was introduced in the United Kingdom in 2016, despite all the legal efforts the tobacco industry went through to abolish the law. Standardized packaging requirements are expected to increase the effectiveness of health warnings and reduce misunderstandings about the risk of smoking.

Figure 5: Negative advertising campaign

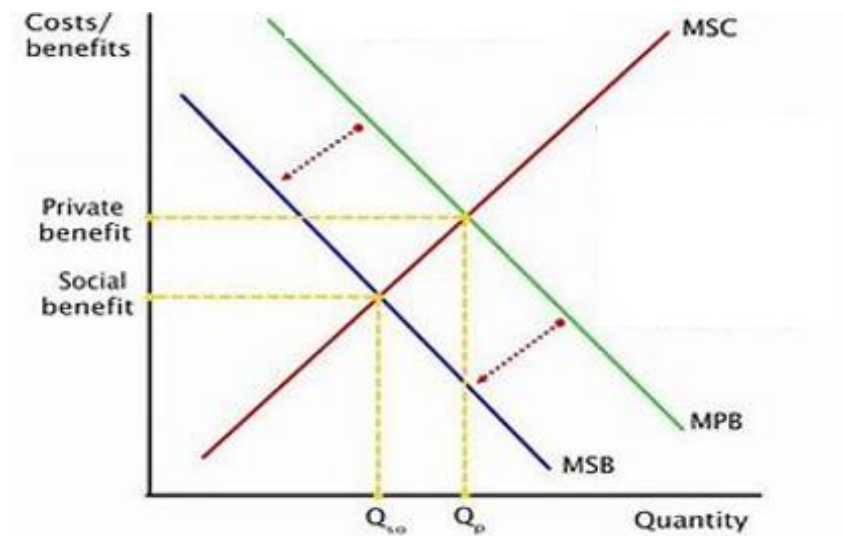


Figure five above demonstrates a diagram providing an insight on the impact of what the government campaigns and negative advertisement will have from the marginal private benefit moving down in order to encounter the socially optimal point on the diagram. This then reduces the quantity consumption of tobacco and welfare loss. From the usage of the government health campaigns to prevent smokers from consuming tobacco will create people to have a negative reaction towards the activity then shifts the marginal private benefit curve.

Market performance after standardized packaging

In the United Kingdom, standardized packaging laws came into force in May 2016, allowing retailers to sell old inventory within a year. Starting May 21, 2017, all packs sold in the UK must meet standardized requirements, such as removing most branding features except for standard font names and increasing graphic health warnings from the back of the pack.

New data from the northeast reveal that the new pack is impacting smokers. From the smoker who saw the pack:

- 60% thought it was unattractive
- 51% were more aware of health warnings
- 29% thought about quitting
- 29% made them wish they had never started smoking
- 26% are not very excited about having their next cigarette
- 23% less likely to take their packet of cigarettes out from their bags in front of friends and family (Ash.org, 2017)

Conclusion

In conclusion, the tobacco industry has impacted not only the environment but also lives of humans within the United Kingdom and has been a failing industry because of the social costs of manufacturing them and buying them and because of the negative impacts the tobacco industry creates such as deforestation from the use of fossil fuels, dumping or leaking of waste products into the natural environment, causing eight million death a year globally. However, the solutions were put into effect to change consumer behaviour and the taxation is used to reduce the negative externality. Which that tobacco taxes have led to significant welfare improvements with low smoking rates improving life expectancy and reducing the amount of time lost due to absenteeism. Taxation also benefits the environment by producing less toxic pollutant into the air. Also, the other solution being the government setting up negative advertising campaigns and standardized packaging to prevent and discourage smokers from purchasing and using tobacco. The campaigns made by the government and the standardized packaging to create negative advertisement has been affective as many smokers have started to find the packaging unattractive, more aware to health concerns created by smoking, thinking about quitting, and regret smoking. It's vital that the government comes up with new ideas in order to reduce the amount of people who are smoking within the United Kingdom and better the quality of the environment for the future generation of Britain.

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