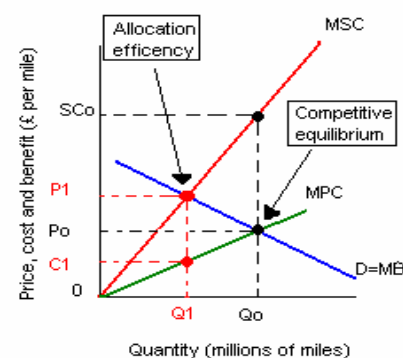


## Fuel Tax

Do you just want cheaper fuel to increase your income? To become a popular Government? Squeeze more profit for your firm? Protect the environment? Break car dependence? These questions are a sign of the ever-increasing pressure for and against a reduction in fuel tax. The government's reluctance to openly discuss its policy has caused a real clouding of the arguments causing a general sense of frustration. This essay addresses both sides of the arena in the pursuit of bringing clarity and reason to an emotional topic. This essay uses the term 'petrol' as defined to be a "flammable fuel used in internal combustion engines"(Oxford Con Dic, 1989: 425), thus including diesel, as well as unleaded vehicles. The issues that are covered are externalities, tax, public transport, who the tax effects, and utility. The arguments are ordered against a reduction then for a reduction.

Over the last 30 years, with the rise of environmental awareness, the externalities connected with the use of motor vehicles have caused major concern to society and has presented a strong argument against a reduction in petrol tax. Pigovian taxes are the best way to correct for the negative impact of externalities by taking into account the social costs of using petrol to such a great extent. These social costs: health, congestion, environmental breakdown and accidents all need correcting. Every time you burn petrol you generate pollution in the atmosphere with carbon dioxide, thus increasing global warming and health problems e.g. asthma, bronchitis, and other respiratory disorders. Congestion causes lost opportunity costs from unproductive time wasted. Accidents cannot be measured accurately as the loss of intellectual productivity cannot account for future possibilities. The best way is to allocate efficiency with social cost added to the pricing model.

As we see in figure 1:



The marginal private cost curve is MPC. D is also the marginal benefit curve. Marginal cost exceeds MPC. In a competitive market, output is  $Q_0$ , price is  $P_0$ . When a Pigovian tax is imposed to show the social costs, then MSC becomes the MC for suppliers' decisions. 'The price rises to  $P_1$  and the quantity falls to  $Q_1$ : the point of allocation efficiency' (Parkin, King 1995: 527).

With the market failure and the externalities addressed the government can gather the tax revenue and tackle the social costs with revenue generated, which brings the price into alignment with their external costs.

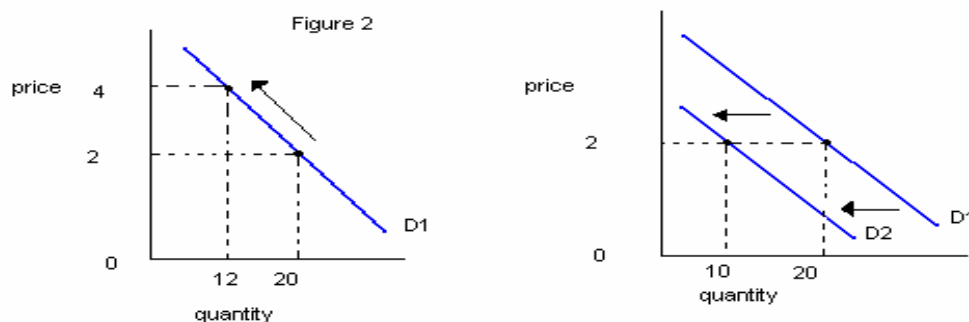
To look closer at the nature of tax and its winners and losers will reveal that all the tax is past onto the consumer in accordance with its inelastic properties. As the rules of tax state, with the fall in quantity demanded being smaller than the price reduction (in percentages). The consumer will be saddled with the larger cut of tax in the short run and all the tax in the long run. Therefore, the consumer is paying for all the externalities and the firm that profits from supplying petrol: pays nothing. As seen above in figure 1, there is a dead weight loss, which is caused from the reduction in the quantity demanded. This welfare loss has been minimized, however, this shows the petrol sector's ability to sustain large tax increases. The lack of response by motorists to the increases in the price of petrol causes the tax to become very appealing for revenue generation. The quantity demanded does not drop much after a tax increase. This shows how large amounts of money can be raised easily. 'In 1999/2000, fuel duties (excluding VAT) raised £22.3 billion, which is 6% of the total governments revenue' (HM Treasury 46: 2000). The market for fuel is able to bear a large tax charge and the extent of the market is sizable too. 'Six pence on all road fuel duties raises as much money as one penny on the basic rate of income tax' (HM Treasury 44: 1999). The suppliers and the government are seen to raise huge amounts of revenue from highly taxed petrol.

In response to the argument for a reduction in petrol tax as the large amounts of revenue generate seem excessive and appear to be public and private profiteering. With the revenue being re-invested in infrastructure as the government is committed to doing. In the Chancellors Pre-Budget Speech in November 1999,

*'...[we] are now in a position – instead of the pre-announced 6 per cent escalator-to make our decisions Budget by Budget with the following commitment: if there are any real term rises in road fuel duties, the revenues will go straight to a ring-fenced fund for the modernisation of roads and public transport' (Smith, 2000; 8)*

These pledged billions give the vehicle user a real choice. The need to break car dependency and shift back the demand curve back instead of a taxing shift along the demand curve will reduce drivers by more.

See figure 2:



The option of substitute transport will make the driver feel they do have a choice to private vehicles. Investment of the revenue from petrol tax is a great asset. Much more than the revenue from the mandatory car tax gives. These improvements are necessary, as the infrastructure needs modernizing. This alternative will drop demand by giving a substitute drivers can rely on. The haulage industry will use it to put its freight back on the railways, if confidence were restored. A solid public transport system reduces demand without tax by using the revenue to change behaviour on petrol reliance.

People are not adverse to tax increases if they know where the money is being spent. There is no way to guarantee that the money allocated to spending on roads and public transport is actually going to be spent in these areas. With the state of the rail system, the amount of congestion and the crackdown on accidents by fines, which many see as a new source of revenue, we are not seeing the benefits from the high petrol taxes: the highest in Europe.

See figure 3:

**Figure 3. European petrol duty and VAT, pence per litre**

	Unleaded petrol
UK	55.47
Netherlands	44.84
Italy	42.93
Germany	40.12
Austria	32.35
Spain	28.04

With these high prices drivers expect to see improvements. This is the essence of their frustration. The modernization the government speaks of has not shown many tangible results. The alternative transport needed has not improved enough to encourage drivers to alter their actions and onto public transport. ‘The cost of living taken across different household groups shows that an increase on petrol tax hits the poorest car owner, as well as, rural dwellers’ (Smith, 2000: 4). These are the people that need a substitute of public transport. Their incomes and budget constraints are the most susceptible to price rises. The governments lack of results in modernizing and producing a good transport alternative are just rationalizations for easy revenue.

As with firms supplying homogeneous product we should be aware of the likelihood for them to maximise their profits in the event of a reduction in petrol tax. If the government were to give a 10 percent decrease in fuel tax the firms would not pass on all the savings to the customer. The small differences in price on the petrol forecourt do suggest price fixing, although illegal, it is difficult to prove. The petrol suppliers might, for example, pass on an 8 percent reduction and profit from the other 2 percent. This is a problem in a homogeneous

market with few firms, indicative of the markets for natural resources. Although petrol users are also trying to increase their position by fuel tax being reduced. The Government are looking after all interests. These three groups are all willing to maximise their utility. As well as income utility there is utility 'as a quantitative measure of psychological satisfaction' (Etrzioni, Lawrence, 1991: 86) present. The chance of promotion from making more profits, getting something cheaper, or covering short falls in other public services are all difficult to value in financial terms. The inter conflict of interest will not allow for mutually beneficial trade. Rational self-interest depends in which of these groups you are, and to the same extent if you think this is an argument for or against a petrol tax reduction.

In conclusion, we have seen that the taxes on petrol are in place to correct externalities by bringing adding social costs to show the real cost of vehicle use. This in turn has shown the petrol market to be one of high taxation with its inelastic nature. The revenue generated would regenerate the public transport sector to allow for alternative travel, although governments have failed to deliver. Tax affects vehicle users who need a substitute for car travel the most. And finally we saw utility maximisation pulling the debate in all directions. Tax reduction maybe a personal issue but there are rational arguments which need addressing to come to a solution in the best interests of society.

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