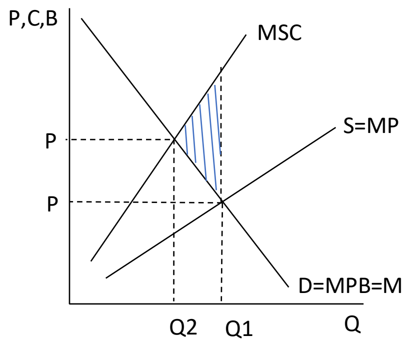
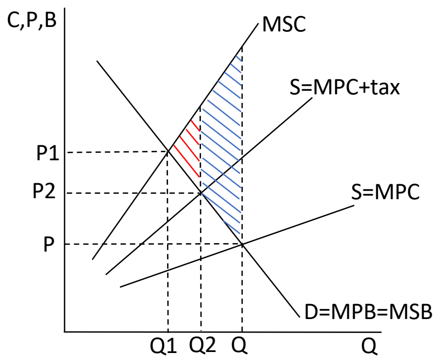
An indirect tax is imposed on producers by the government, indirect taxes are used to help correct market failures. A market failure is the economic situation defined by an inefficient distribution of goods and services in the free market. Market failures are caused by the overproduction of goods with negative externalities these occurs because the price of the goods to the buyer does not cover all of the costs of producing or consuming the good. If all costs were accounted for, the prices of these goods would be higher and people would consume less of them.

The current free market equilibrium is Q1, P1 this is where marginal private cost (S=MPC) meets the marginal social benefit (D=MPB=MSB). This is different to the social optimum Q2,P2 where marginal social cost (MSC) meets the marginal social benefit (D=MPB=MSB). At the free market equilibrium there is too much production at too low a price this results in overproduction.



This market failure can be corrected with an ad valorem tax, this is a tax based on the assessed value of an item. An ad valorem tax increases the cost of production, this means firms are less willing and able to sell at a given price and time. this causes a pivotal inward shift of the MPC=S curve to the MPC+tax curve, as shown on the graph below. This resulted in a contraction along the D=MPB=MSB curve leading to an increase in price from P to P2 and a decrease in quantity from Q to Q2, this would decrease consumption and production. This would then reduce welfare loss from A,B,C to BDE, increasing allocative efficiency. This helps corrects the market failure of overproduction; this is because a decrease in quantity and an increase in price makes the free market closer to the social optimum (Q1,P1).



The effectiveness of this indirect tax would depend on the price elasticity of demand of the good. If the good which is getting overproduced is price inelastic, an indirect tax would increase price from P to P1 leading to a less than proportional decrease in quantity demanded from Q to Q1. As shown on the graph 1. If the good was price inelastic an indirect tax would not be effective in correcting the market failure of overproduction due to a less than proportional decrease in quantity demanded. Although if the good was price elastic an