Air passenger duty tax in the uk economics essay

According to the new system, commercial flights are divided into four bands which differ in price and distance. This essay will attempt to determine whether the new policy is justified and how it will affect the market for short haul flights, the competition, environment and the revenue for the government.

a)

In order to find out how the increase in Air Passenger Duty affects the market for short haul flights, it is necessary to carry out a supply and demand analysis of air travel.

Figure 1: Market for short haul flights after the APD increase (Adapted from Sloman & Garratt, 2010).

Figure 1 shows airplanes supply and passengers demand for flights after the APD increase.

According to Sloman and Garratt (2010), when price of a product or service rises, quantity demanded falls, and when price descends, quantity demanded increases. Therefore, the demand curve is downwards sloping to the right. On the other side, as price rises, quantity supplied goes up. As price decreases, quantity supplied goes down. In effect, the supply curve is upwards sloping. The point in which both curves intersect is the equilibrium price. At this point the amount supplied equals the amount demanded.

Before the hike of the tax the seats (Q1) were sold at the price of P1. The increase of APD causes the supply curve to shift upwards to the left. It is because change in supply can be triggered by determinants other than price,

like government policies (i. e. taxes), which in result increase costs of production (Sloman & Garratt 2010). In order to cover it, an airline needs to raise the price per seat. This increase in fares affects passengers, who are now willing to purchase fewer seats. This is shown by a movement along D curve to the new equilibrium point P2 – Q2. If the movement did not happen, it would result in a surplus, i. e. the quantity of plane seats would exceed the number of customers willing to buy it.

Basing on the law of demand, the quantity demanded of plane seats drops due to the increase in fares, illustrated by P2 and Q2. However, taking into account the fact that a rise in APD is relatively low (£1 in economy and £2 in premium class), it is unlikely that the drop from Q1 to Q2 will be steep.

b)

The increase in APD on short haul flights will not necessarily mean that the passengers will foot the whole bill. Such flights are frequently used and the rise in APD is relatively low, so in many cases the increase will be shared by customers and airlines. Sloman and Garratt (2010) explain that " consumers pay to the extent that price rises. Producers pay to the extent that this rise in price is not sufficient to cover the tax." So, passengers should face a rise of the price difference between P1 and P2 (Figure 1), which is less than £1. The remaining part should be paid by an airline. However, this will depend on specific airlines: their revenue, policies and popularity of their offer. The more price inelastic is the demand for the airline, the bigger customers' share.

So budget airlines, like Ryanair and easyJet, are very unlikely to cover the increase in APD. This is due to the fact that their fares are very competitive, thus customers will be better off choosing their service even if the whole APD is passed in them.

On the other side, traditional airlines (like BA) operating on domestic and short European routes could decide to bear the burden of the whole amount due to the fact, that they face a numerous competition in the industry and from other means of transport. Therefore, it could be reasonable for such airlines to cover some share of APD increase and keep the demand and profit high. They could achieve it by, for instance, reducing ticket prices and sales or scrapping other charges where possible.

Therefore, if the increase is shared by customers and airlines, the price-increase for passengers will be less than £1 in the cheapest class.

c)

Long distance fast train travel is considered to be the closest substitute to short haul fights. Therefore, if the price of the flights rises due to APD increase, customers (especially leisure travellers) may switch to the cheapest alternative, i. e. trains. According to Sloman and Garratt (2010), if demand is affected by other factor than price, the whole demand curve shifts to the right or to the left. The number and price of substitute goods is one of the determinants of the shift in demand. This means that if the price of one product rises, the demand for its substitute will go up.

Figure 2: Market for train journeys after the price increase of short haul flights. (Adapted from Sloman & Garratt, 2010).

The graph illustrates the effect of the increase in short haul prices on the market for train journeys. The horizontal axis represents a number of passengers, whereas the vertical axis shows prices for a train ticket. Before the increase in flights prices, the equilibrium for train journeys was at the price P1 and quantity Q1. However, the demand for train journeys reacts to a high price of the substitute good, as more people travel by train rather than fly. Thus the demand curve shifts to the right. As a result, at the current point of price P1 there is shortage of the service, as more customers are willing to choose train travel than is available on the market. In order to eliminate the shortage, there must be a movement upward to the right on the supply curve to the new intersection point P2 Q2. In effect, more commuters use train service at a higher price.

d)

Knowing how elastic the demand for air travel is, it is possible to predict the effect of the increase in APD on the demand, as well as on the environment and tax revenue.

Sloman and Garratt (2010) suggest that as the price of goods rises, the quantity demanded falls. Therefore, demand responds to a change in price. This is called the price elasticity of demand. To examine this concept, the percentage change of quantity demanded must be divided by the percentage change in price. The result of the calculation determines whether demand is elastic or inelastic.

Demand is elastic when the result is greater than 1. It indicates that a change in quantity demanded is larger than a change in price. Consequently, inelastic demand occurs when a change in price causes relatively small change in quantity demanded. When quantity demanded and price change by the same proportion, then demand is unit elastic (Sloman & Garratt, 2010).

The price elasticity of demand is affected by various determinants, like substitutes, proportion of income spent on the product and the time period. The more alternatives there are, the bigger is the price elasticity of a good. The more income is spent on a good, the less elastic it is. Finally, with a passage of time, demand for a product may become more price elastic, because consumers may have time to find better options.

Overall, average price elasticity for air travel is below 1 (Department for Transport, 2009). According to IATA (2009), prices of short haul flights and are more elastic than prices of long haul flights. This is due to the fact that companies operating on short haul routes face bigger competition from other airlines and different means of transport. Taking into account delays and time consuming check-in process, travel by car, coach or train seems to be a good alternative. However, the long haul flights cannot be easily replaced as there are not many substitutes for them.

According to HM Revenue and Customs (2009), APD increase will reduce the demand by 1% in 2010-11 and by 1. 5% in the following year. This small reduction in demand is supposed to save hundreds thousands tonnes of CO2. Therefore, other things being equal, the policy has a potential to help the

environment. This, however, depends on the customers, because if they switch to cheaper airlines, the effect on pollution will be less significant than expected.

APD increase is predicted to raise additional hundreds million pounds in tax revenue, because people, even if the demand falls, will still need to fly and pay extra charges.

e)

The reform of APD has been endorsed by the government and environmental agencies as a necessary " green tax". They claim that the aviation is under-taxed in comparison with other industries. According to IATA (2008), the rise could possibly generate over £700 million additional revenue per year, which could help in reducing the deficit. Moreover, the policy has a potential to reduce flights by 0. 4% in 2010-11 and by 0. 6% which could save 0. 4 and 0. 6 million tonnes of CO_2 respectively. Other pollutants will also be reduced, as well as congestion and noise around airports (HM Revenue & Customs, 2009).

The policy divides flights into four bands, ensuring that passengers on long haul flights pay more, due to the bigger environmental impact. It also encourages business passengers to use clean alternatives, like video-conferencing or high-speed train. The government emphasise that thanks to the increase in APD, other methods of transport are given a green light, because other than price, they would not be able to compete with air travel.

Another benefit of the reform is that it ensures that regional employment on domestic routes is not largely affected by it. Therefore the increase in Band A is only £1 – £2. What is more, the policy does not discourage airlines from opening new routes or keeping the routes in rural areas. If there was a tax per plane instead of APD, connections with a low passenger load would be discontinued (HM Revenue & Customs, 2009).

On the other side, the reform has many opponents who argue that APD is unjust for passengers and environment. The Independent (2010) points out that the new division is not based exactly on the mileage, but on the distance from London to the capital of the country destination. Therefore, in some cases it will be cheaper to go further, for example Hawaii falls into Band B, whereas Cancun, Mexico into Band C. This negates the whole idea of APD as a green tax. What is more, the policy rewards inefficiency by charging tax per passenger rather than per plane. A flight with empty seats is charged less tax than one which is full, even though they both have the same effect on environment. Also, charter planes are unfairly exempt from APD.

Moreover, APD reform strikes families who would have to pay extortionate charges to go on holiday abroad. Decrease in demand for exotic package holidays may bring a loss to British travel agencies, as well as to many developing countries who count on revenue from tourism. As it was mentioned above, the policy favours certain destinations over other, even if the distance is very similar (e. g. Turkey and Egypt).

Also, the tax hike can force many budget airlines to cancel unprofitable routes and move their businesses to Europe, where the charges are not as severe. Many UK travellers may want to reduce the burden of long haul prices by flying from Europe. Finally, foreign visitors may be put off by the highest tax in Europe, which they have to pay on the flight back home. They can decide that their visit in UK is not worth the price and instead they pick up different destinations. All these cases suggest that British aviation and tourism could suffer a loss and the government would lose much revenue from both industries.

In conclusion, the policy seems to bring more damage than good. Because it raises many controversies, especially with regard to rewarding inefficiency, the government should look for another solution, possibly more competent tax per plane.

To sum up, according to the law of demand, APD rise should slightly reduce the demand for flights and increase the demand for substitutes, like train journeys. In many cases the additional charge will be partially covered by airlines. The policy could raise an additional income for the government and reduce the pollution. However, all these optimistic objectives depend on the decisions made by passengers. Soon it will be known if the policy is a blessing or a curse for economy and environment.