

## Esercizio 4

Describe what are the costs and benefits of a tax. In which conditions the costs are minimized?

### The Costs of a Tax:

- For the same number of units of a particular good the price will be higher than pre-tax. A tax causes inefficiency because it discourages mutually beneficial transactions between buyers and sellers. So if a tax does not discourage transactions, it causes no deadweight loss. In this case, the tax simply shifts surplus straight from consumers and producers to the government.
- In the real world, the incidence of an excise tax usually falls unevenly between consumers and producers, as one group bears more of the burden than the other.
- Because of the wedge created by the tax, we know that some transactions don't occur that would have occurred without the tax. If these two sets of people were allowed to trade with each other without the tax, they would engage in mutually beneficial transactions. So it's not surprising that in the case of an excise tax, the rise in the price paid by consumers causes a loss equal to the sum of the areas of a rectangle and a triangle
- In considering the total amount of inefficiency caused by a tax, we must also take into account the resources actually used by the government to collect the tax, and by taxpayers to pay it, over and above the amount of the tax. These lost resources are called the **administrative costs** of the tax. The most familiar administrative cost of the U.S. tax system is the time individuals spend filling out their income tax forms or the money they spend on accountants to prepare their tax forms for them. (The latter is considered an inefficiency from the point of view of society because accountants could instead be performing other, non-tax-related services.) Included in the administrative costs that taxpayers incur are resources used to evade the tax, both legally and illegally. The costs of operating the Internal Revenue Service, the arm of the federal government tasked with collecting the federal income tax, are actually quite small in comparison to the administrative costs paid by taxpayers.
- The total inefficiency caused by a tax is the sum of its deadweight loss and its administrative costs. The general rule for economic policy is that, other things equal, a tax system should be designed to minimize the total inefficiency it imposes on society.

## **Benefits of taxes**

- Through taxes the government of one's country is able to finance public works, education, national defense and health care for those unable to afford it.

## **Conditions in which costs are minimized**

- If we want to minimize the cost of a tax, we should opt to tax only those goods for which demand or supply, or both, is relatively inelastic. For such goods, a tax has little effect on behavior because behavior is relatively unresponsive to changes in the price. In the extreme case in which demand is perfectly inelastic (a vertical demand curve), the quantity demanded is unchanged by the imposition of the tax. As a result, the tax imposes no deadweight loss. Similarly, if supply is perfectly inelastic (a vertical supply curve), the quantity supplied is unchanged by the tax and there is also no deadweight loss. So if the goal in choosing whom to tax is to minimize deadweight loss, then taxes should be imposed on goods and services that have the most inelastic response—that is, goods and services for which consumers or producers will change their behavior the least in response to the tax. (Unless they have a tendency to revolt, of course.)
- And this lesson carries a flip-side: using a tax to purposely decrease the amount of a harmful activity will have the most impact when that activity is elastically demanded or supplied.