

## **Answer on Question #44047 – Economics – Microeconomics**

Why should the government provide public goods as opposed to private firms?

### **Solution**

Private markets do not provide some essential goods and services, such as national defense. Because national defense is so important to the nation's existence, the government steps in and entirely funds and administers this product.

Public goods differ from private goods in two key respects. First, a public good can be used by one person without reducing the amount available for others to use. This is known as shared consumption. An example of a public good that has this characteristic is a spraying or fogging program to kill mosquitoes. The spraying reduces the number of mosquitoes for all of the people who live in an area, not just for one person or family. The opposite occurs in the consumption of private goods. When one person consumes a private good, other people cannot use the product. This is known as rival consumption. A good example of rival consumption is a hamburger. If someone else eats the sandwich, you cannot.

The second key characteristic of public goods is called the nonexclusion principle: It is not possible to prevent people from using a public good, regardless of whether they have paid for it. For example, a visitor to a town who does not pay taxes in that community will still benefit from the town's mosquito-spraying program. With private goods, like a hamburger, when you pay for the hamburger, you get to eat it or decide who does. Someone, who does not pay, does not get the hamburger.

Because many people can benefit from the same public goods and share their consumption, and because those, who do not pay for these goods, still get to use them, it is usually impossible to produce these goods in private markets. Or at least it is impossible to produce enough in private markets to reach the efficient level of output. That happens because some people will try to consume the goods without paying for them, and get a free ride from those, who do pay. As a result, the government must usually take over the decision about how much of these products to produce. In some cases, the government actually produces the good; in other cases it pays private firms to make these products.

The classic example of a public good is national defense. It is not a rival consumption product, since protecting one person from an invading army or missile attack does not reduce the amount of protection provided to others in the country. The nonexclusion principle also applies to national defense. It is not possible to protect only the people, who pay for national defense while letting bombs or bullets hit those, who do not pay. Instead, the government imposes broad-based taxes to pay for national defense and other public goods.