



Externalities: Prices Do Not Capture All Costs

Finance & Development

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Consumption, production, and investment decisions of individuals, households, and firms often affect people not directly involved in the transactions. Sometimes these indirect effects are tiny. But when they are large they can become problematic—what economists call *externalities*. Externalities are among the main reasons governments intervene¹ in the economic sphere.



Smoking is bad for you
(photo: Radius Images/Corbis)

Most externalities fall into the category of so-called *technical externalities*; that is, the indirect effects have an impact on the consumption and production opportunities of others, but the price of the product does not take those externalities into account. As a result, there are differences between private returns or costs and the returns or costs to society as a whole.

Negative and positive externalities

In the case of pollution—the traditional example of a *negative externality*—a polluter makes decisions based only on the direct cost of and profit opportunity from production and does not consider the indirect costs to those harmed by the pollution. The indirect costs include decreased quality of life, say in the case of a home owner near a smokestack²; higher health care costs; and forgone³ production opportunities, for example, when pollution harms activities such as tourism. Since the indirect costs are not borne⁴ by the producer, and therefore not passed on to the end user of the goods produced by the polluter, the social or total costs of production are larger than the private costs.

There are also *positive externalities*, and here the issue is the difference between private and social gains. For example, research and development (R&D) activities are widely considered to have positive effects beyond those enjoyed by the producer that funded⁵ the R&D - normally, the company that pays for the research. This is because R&D adds to the general body of knowledge, which contributes to other discoveries and developments. However, the private returns of a firm selling products based on its own R&D typically do not include the returns of others who benefited indirectly. With positive externalities, private returns are smaller than social returns.

When there are differences between private and social costs or private and social returns, the main problem is that market outcomes may not be efficient. To promote the well-being of all members of society, social returns should be maximized and social costs minimized. This

¹ (to) intervene – intervenieren

² smokestack - Schornstein

³ (t) forgo – auf etwas verzichten, ohne etwas auskommen

⁴ borne, past participle of (to) bear – etwas ertragen, aushalten

⁵ (to) fund – finanzieren, finanziell fördern



implies that all costs and benefits need to be internalized by households and firms making buying and production decisions. Otherwise, market outcomes involve underproduction of goods or services that entail⁶ positive externalities or overproduction in the case of negative externalities. Overproduction or underproduction reflects less-than-optimal market outcomes in terms of a society's overall condition [...].

Consider again the example of pollution. Social costs grow with the level of pollution, which increases in tandem⁷ with production levels, so goods with negative externalities are overproduced when only private costs are considered in decisions and not costs incurred⁸ by others. To minimize social costs would lead to lower production levels. Similarly, from a societal perspective, maximization of private instead of social returns leads to underproduction of the good or service with positive externalities.

[...]

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Source: <http://www.imf.org/external/pubs/ft/fandd/basics/external.htm>. Last updated: 2012, Last accessed: 19.03.2019.

Tasks:

1. Read the text quickly and get a general impression of what externalities are.
2. Read the text again carefully and mark the paragraphs which explain:
 - a) negative externalities
 - b) positive externalities
 - c) inefficient market outcomes due to externalities
3. Explain externalities and the effects on the market principle (demand, supply and price) as well as on the idea of the invisible hand.

⁶ (to) entail – beinhalten, mit sich bringen

⁷ in tandem – zusammen mit

⁸ incurred costs – entstehende Kosten