EconoMag

The Show that demystifies Economics

Environmental Economics - Part 3

The Environment and the Economy: What's the true economic cost of pollution? ©

by Pierre Vercueil

Welcome back to another edition of Economag on EnglishWaves. Our current topic focuses on the links between our natural environment and the global economy. Not only do humans have an increasing appetite for natural resources, our consumption thereof bears negative externalities, or in other words, pollution. Pollution is a serious threat to economic growth, as it diminishes the planet's ability to reproduce natural resources.

Economically speaking, we can think of pollution as a cost of consumption activities. This cost is necessarily borne by someone or something else. An example would be a smoker: he or she pollutes the air in a specific area. If a non-smoker stays within that area, they too might be affected. Whomever the smoke affects might have to incur medical costs, and if they can no longer go to work, their employer will suffer a loss of productivity. It's in this way that the costs are carried over, through the economy, and a multiplier effect takes hold. Money used to buy medicine or the money lost due to missed days at work are called external costs - in this case, caused by the smoke. This is particularly troublesome in economic terms because the cigarette company - the agent profiting from the consumption activity - does not share its profits with the agents who incur the external cost. It's for this reason that things such as cigarettes are so heavily taxed: those extra tax revenues are supposed to be used to address the negative external costs.

Another example would be the production process of something such an iPhone. Assume the factory is located next to a river, which acts as a tourist attraction creating revenue for local businesses. If the factory pollutes the river, the local community will suffer - but Apple will continue to make its profits. The local community will have to spend money in order to clean the river. In other words, economic agents other than Apple will have to bear the external cost; Apple only focuses on its private costs, such as labor, machinery, or the lease of the land for the factory. When we combine the external cost borne by the community with the private cost borne by Apple, we end up with what we call in economics the total *social cost*. Total social cost is a more accurate reflection of what needs to be paid in order to be able to consume.

Noise pollution is another element to consider. Buying a house next to an airport is always cheaper due to the noise created by airplanes. Noise created by an airplane is a cost borne by local residents, as airplane companies do not incur it. Thus the total social cost of the airline industry is much larger than just buying fuel and planes - and we haven't even started considering jet engine pollution yet! This social cost principle can be applied on a much larger

scale - just driving your car down the street, or using electricity in your home has implications on a global scale in the form of global warming.

Next time we'll have a look at global initiatives aimed at reducing worldwide social costs from different countries' consumption patterns. Stay tuned to Economag on EnglishWaves.