

Economy-wide Impacts of consumer responses to environmental information disclosure in Tokyo and the other parts of Japan

Topic: Environmental IO models 10

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Environmental problems such as global warming due to GHG emissions have necessitated some constraint in our economic activities, as many countries and many people around the world are concerned about these issues. Environmental and economic policies such as carbon tax are one such constraint.

A tax policy can be interpreted as a desirable method that can lead the economy, which has to pay the social cost of false economic activity or market failure, to a more optimal path. However, this policy will surely raise prices of goods. On the one hand, this price rise will benefit the public sector, but on the other hand, consumers demand will decline. The magnitude of the reduction usually depends on the price elasticity of demand, and the increase in government gain depends on the necessity of the goods for the people.

Therefore, it is not necessarily trivial to ask whether the total effect of rising energy prices will be negative. In addition, nowadays, many people are concerned about environmental problems, and there are indications that consumers tend to change their purchasing behavior regarding certain goods to take environmental concerns into account even if this necessitates paying a higher price.

This paper will empirically prove how the rise in oil and gas prices due to environmental policies like carbon tax affects the total production/consumption when we take into account the change in consumer behavior reflecting their attitudes toward preventing global warming. The main result of the analysis using an input-output model and price elasticity of demand in several sectors will show that most of sectors do not experience a decline in production after a price rise except the biggest sector, real estate. In Japan, real estate might be the main target to support for consumer's purchasing from the viewpoint of economic policy.