

Consumption | Individual communication

IC - (21126) - WHAT DETERMINES CONSUMERS' BEHAVIOR IN WATER AND ELECTRICITY MARKETS: IS PRICE AN EFFECTIVE DETERRENCE MECHANISM?

Paulo Ramísio²; [Lígia Pinto](#)¹; Marieta Valente¹

1 - NIPE, Universidade do Minho; 2 - CTAC, Universidade do Minho

Background and objectives

The physical and economical accessibility to secure water and electricity are between the most fundamental societal's needs. Additionally, in many regions, water resources have also a significant, and competitive, role in electricity production. Therefore, a call for a more efficient and sustainable water consumption and electricity use are common in environmental and economic policy.

Understanding the determinants of water and electricity consumption is therefore crucial for designing demand side policies. This paper focuses on households' consumption of water and electricity and whether prices can moderate consumption of these utilities, through eliciting consumers' willingness to accept increases in price without adjusting their consumption. In addition, we examine consumers' willingness to adopt practices to reduce water and electricity consumption.

Process and methods (for empirical research)

A survey for the elicitation of household preferences with respect to water and electricity consumption was designed and administered online to a sample of 400 consumers in Portugal.

Main results (or main arguments in the case of critical reviews)

Overall, preliminary results show that:

- consumers engage more frequently in saving electricity than water;
- more consumers consider price an important determinant of consumption with respect to electricity consumption than water;
- most consumers (50,75%) consider their water price as fair, while 45% consider it high. On the other hand, 76% consider electric prices high, and only 23% consider it fair.
- consumers would be willing to accept, on average, a price increase of 35% in their water bill without adjusting consumption, while that percentage is 28% for the case of electricity.

Implications for research and practice/policy | Importance and originality of the contribution

In the context of increasing uncertainty in water availability, and the pressure on renewable energy sources for electricity production, it is of utmost importance to incentivize an efficiency behavioral change. Our results show that price alone is likely to be a poor instrument for policies aimed at increasing the sustainability of water and electricity consumption.

Palavras-chave : consumer behaviour, water and electricity nexus