

Research brief: European attitudes to water pricing: Internalizing environmental and resource costs



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Summary

The general public of the European Union member states are largely positive towards including costs imposed on the environment and the water resource, as a consequence of anthropocentric water use. Within an extensive spatial dataset constructed for the purpose, we estimate the effect of information levels of water related problems and affordability concerns on the attitude towards environmental water pricing among the general public. The analysis shows that both the information level and affordability concerns positively affect the attitude.

Conclusions

- There is significant spatial heterogeneity across the European regions in the attitudes towards full internalization of environmental and resource costs in the price of water
- Higher levels of information positively affects the attitude among the general public
- Affordability concern positively affects the attitude - if social negative effects are corrected for.

Backgrounds & Methods

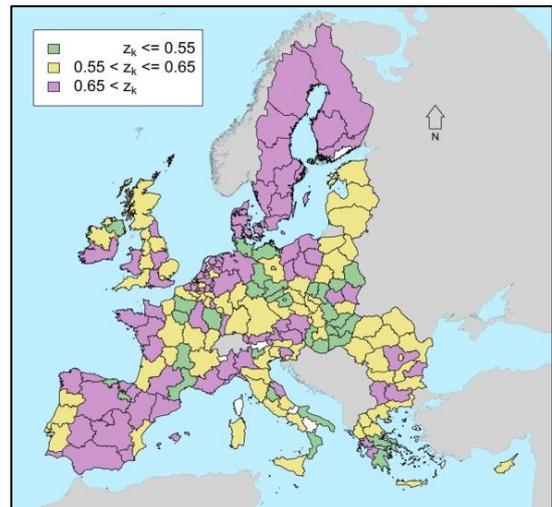
From a welfare economic perspective, optimal allocation of the water resource between different uses should be aimed for, taking both market and non-market values into account. A major problem in water management is that water prices to a large extent only cover the financial costs, and fails to reflect the resource scarcity and the environmental effects of water use.

The concept of efficient water pricing has been introduced as part of the European Water Framework Directive (WFD), in which one of the objectives is the internalization of environmental and resource costs in the price of water. Despite the clear objective of the WFD, none of the EU member states fully comply with these obligations, though some states have advanced further than others.

General barriers to implementation of full cost recovery have been hypothesized by the European Environmental Agency (EEA) to include lack of information and affordability concerns among the public.

Results

The map shows the share of respondents in each of the European regions with a positive attitude towards internalization of environmental and resource costs in the price of water. A Global Moran's I analysis finds a significant spatial pattern in the attitudes.



	Totally disagree	Tend to disagree	Tend to agree	Totally agree
<i>info</i>	-0.014 (0.002)***	-0.007 (0.001)***	0.003 (0.001)***	0.018 (0.003)***
<i>fair</i>	-0.011 (0.004)**	-0.006 (0.002)**	0.002 (0.001)***	0.014 (0.005)**

***p < 0.001, **p < 0.01, *p < 0.05.

Estimating the effect of information level and affordability concern of the respondent in an ordered probit model, controlling for member state specific effects, leads to the partial average effects of the two variables on the attitude reported in the table. Thereby estimation results show positive and significant effects of information level and affordability concern. The estimated effect of information level supports the hypothesis of the EEA. However, affordability concerns are found not to be a barrier, if the negative social effects of increasing water prices are accounted for.

Recommendations & Perspectives

- Increasing the information level of water related problems among the general public, might ease implementation of the internalization of environmental and resource costs in the price of water across the European Union member states.
- Affordability concerns among the general public should not refrain governments from full internalization, if inequity measures to correct for distributional aspects of the price increase are introduced simultaneously.

More information

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