Residential Water Use

This publication looks at the impacts of policy measures such as water pricing and appliance labelling on household water consumption. It examines the determinants of water-saving behaviour and investment in water-saving appliances and whether having to pay for water according to volume actually reduces consumption. The role of respondent’s environmental “norms” is also analysed, suggesting that measures informing households of the environmental implications of excessive water consumption could have a significant complementary part to play. In addition, the question of people’s perception of tap water quality is considered in the survey. The book presents results on household satisfaction with the quality of tap water and on their motivation to buy bottled water for drinking either for health reasons or for reasons of taste.

Drawing upon a survey of over 10 000 households in ten OECD countries, the book provides new insights into key issues such as:

- **The determinants of residential water consumption.** This includes a detailed assessment of the impacts of water pricing. It is found that charging for water on a volumetric basis reduces water consumption by approximately 20%. The distributional impacts of water pricing measures are also assessed.

- **The determinants of water-saving behaviour.** While water pricing clearly matters, it is found that the environmental “norms” of the respondent are also important. This highlights the importance of informing households of the environmental implications of excessive and wasteful water consumption.

- **The determinants of investment in water-saving residential equipment.** In this case the environmental “norms” of the respondents are important determinants of the likelihood of investing in water-saving equipment. Above all, what matters the most for investment is home ownership and water charging on a volumetric basis. Attention is also paid to the role of eco-labelling. The results indicate that eco-labelling (in general) complements marginal pricing of water at the point of use.

- **The willingness-to-pay (WTP) for improved water quality services.** While stated WTP is relatively low, in countries where there is significant dissatisfaction with water quality, it is not negligible. Amongst the factors that explain differences in WTP is the level of trust in government authorities.

- **The factors that encourage households to purchase bottled water.** Many of the factors that encourage households to purchase bottled water for usual household consumption are the same as those that explain WTP for improved public water service delivery. However, concern about the negative impacts of solid waste has a very strong negative impact on bottled water consumption.
Figure 2.4. Share of households who have water efficient appliances, by type of water fee

- **Water efficient washing machine**
  - No charge
  - Flat water fee
  - Variable water charge

- **Low volume or dual flush toilets**
  - No charge
  - Flat water fee
  - Variable water charge

- **Water flow restrictor taps/low flow shower head**
  - No charge
  - Flat water fee
  - Variable water charge

Figure 2.5. Household satisfaction with quality of tap-water for drinking, by country

- % satisfied with their tap water
- Of those dissatisfied – % having taste concern
- Of those dissatisfied – % having health concern

Source: *Greening Household Behaviour: The Role of Public Policy* (OECD, 2011)