

Heino, O. and Takala, A. 2015. Social norms in water services: Exploring the fair price of water. *Water Alternatives* 8(1): 844-858



---

## Social Norms in Water Services: Exploring the Fair Price of Water

### Ossi Heino

Tampere University of Technology, Department of Chemistry and Bioengineering, Tampere, Finland;  
ossi.heino@tut.fi

### Annina Takala

Tampere University of Technology, Department of Chemistry and Bioengineering, Tampere, Finland;  
annina.takala@tut.fi

---

**ABSTRACT:** The aim of this article is to analyse price fairness in water services. Although a considerable amount of literature has been published on water pricing, these studies have mainly approached the question from instrumental and rational perspectives. Little attention has been paid to the human side of water pricing. Therefore, the general objective of this research is to shed light on these softer factors, filling the gap in knowledge of the emotional connections with water services. In this research, we explored people's ideas and views about water pricing by conducting 74 interviews in 11 municipalities in Finland. The results suggest that people are not just rational consumers of a good but also have emotional ties to water utilities and municipal decision-making. The general attitude towards a water utility is confident and sympathetic if its operations and municipal decision-making processes are considered as fair, and conversely, unsympathetic if operations and decision-making are considered unfair. This is a topical issue as many water utilities are facing pressures to increase water prices; being fair appeared to be a crucial way to gain appreciation and support through difficult times. Because fairness seems to be an emergent property of social experiences, special attention should be paid to the 'soft side' of water services.

**KEYWORDS:** Water services, water pricing, price fairness, social norms, Finland

---

### INTRODUCTION

In modern life, a functioning water supply is firmly rooted in people's daily routines. One can simply turn on the tap whenever water is desired and take whatever amount of water is needed. As such, one tends not to think about water supply unless, for one reason or another, something exceptional occurs. Everything seems to be fine as long as the service stays invisible. Despite such invisibility, functioning water services are crucial to the welfare of societies.

It is the task of water utilities to promote public, communal well-being through the production of water services in the name of public interest. Water utilities represent one type of public utility, which implies that water utilities have a special collective dimension in terms of serving the common good. This brings a certain ethical side into the picture because it is not sufficient for water utilities to only fulfil legislative requirements. As McNabb (2005) states, public utility administrators have a moral responsibility that goes far beyond adhering to the letter of the law. Consequently, public utilities must balance the need for greater good with the promises given to shareholders, taking into account aspects such as the standard of justice, the need for caring, and other ethical issues (McNabb, 2005: 45-53).

Furthermore, as utilities operate in a natural monopoly, they are legally required to serve all customers in their operations area fairly and without discrimination. Thus, although water utilities

function as part of technical, material and financial systems of municipalities, techno-economic problem identification is admittedly inadequate.

Problems related to water services are often said to be caused by insufficient resources. Generally speaking, water utilities are facing difficult times due to increasing investment pressures that compel them to enhance the service production and seek financial resources. Because user fees are typically the key income source, the main focus and interest turn towards water pricing. However, as many different types of values are associated with water, one cannot address water pricing with a market-oriented approach, as in pricing of most goods. Thus, water pricing questions also play an important role in the political decision-making process.

Because of the issues discussed so far, we are necessarily dealing with the valuation problems of water and sanitation services. One alternative approach is to take a user perspective and investigate the valuation of water price with a bottom-up approach. It could be realised by using the willingness-to-pay concept, which is focused on finding the highest sum of money that people are willing to pay for the good in question. Nevertheless, that is not the mission of this research. Instead, we assume that the monetary valuation of water services would represent only the surface of the complex societal issue (cf. Schumacher, 1973).

In this article, we will discuss price fairness and the many ways in which fairness of water pricing can be understood. The general objective of this research is to shed light on the softer factors, and to explore the emotional connections people have with water services. We conducted 74 interviews in 11 Finnish municipalities to uncover people's ideas and views about water pricing. Through these interviews we aimed to understand the reality of theoretical phenomena and in this article, we present excerpts from the interviews to exemplify our analysis. We invite the reader to think beyond the obvious, visible and measurable structures of water pricing to thereby broaden the scope of thinking in regard to this pricing.

## BACKGROUND

The tariff setting plays a crucial role in the management of water services.<sup>1</sup> It is no coincidence that water pricing has been discussed extensively in the academic world, especially by economists and engineers. Most of the attention has been directed towards the development and analysis of different pricing models as well as cost recovery, social issues in the pricing, and the complications related to diverse interests (e.g. Jones, 1998; Gaur, 2007; Thorsten et al., 2008; Stavins and Olmstead, 2009; François et al., 2010).

In the discussions of the international contexts, water has been described as a public good and human right, thus questioning the treatment of water merely as an economic good (Hoffbuhr, 2004). As water has manifold purposes and priorities of use as well as diverse values, one must balance between different pricing interests. Typically, primary and competing purposes are promoting economic efficiency, generating revenue, allocating natural resources and advancing economic equity or fairness (see e.g. Griffin, 2001; Ayoo and Horbulyk, 2008; see also Mohayidin et al., 2009).

Then again, highlighting economic features of water can be seen as an important tool to promote equity, efficiency and sustainability in the communities. Increasing prices, for example, can be used to expand the service to those who are currently outside the infrastructural network. Furthermore, price increases can impact the development of more efficient technology, and the sustainable use of natural resources (Hoekstra, 1998; Rogers et al., 2002). Nevertheless, it should be remembered that the

---

<sup>1</sup> According to the Finnish legislation, water utilities should cover their costs with user fees: "The charges for water services must be such that they cover the investments and costs of the water supply plant in the long term. The charges may include only a minimum return on the capital" (Finnish Water Services Act).

problematic of water pricing is not merely a technical issue; it is also highly value-bound. Thus, versatile approaches should be used (Hoekstra, 1998).

Still, water pricing is typically treated as a precisely definable, technically manageable issue in both literature and practice. For example, while social factors related to water pricing have been perceived and identified (Burrill, 1997; Rogers et al., 1998; OECD, 2002; Diakité et al., 2009; EEA, 2013), they are usually treated somewhat mechanically. Water pricing has mainly been treated as a question of commensurable valuation of natural resources and services in a rational sense. Therefore, calculating a price that reflects the 'true value of water' in different contexts has been the main focus of theories, guides and discussions regarding water pricing (see e.g. EEA, 2013). These considerations imply that the focus is on trying to manage, rather than understand the 'soft' emotional dimensions of water pricing.

## RESEARCH CONTEXT AND APPROACH

Let us briefly introduce the context of the empirical part of the research. Generally speaking, there are approximately 1500 water utilities in Finland, and their tariff structures vary. There may be an initial connection fee, a volumetric fee based on water usage, a fixed charge element and a water meter service charge. In addition, water utilities can charge for other fees related to issues such as management of storm water. The legislative starting point is that the fees charged by water utilities should cover all long-term costs and investments. However, in some cases, water utilities are subsidised by the municipality whereas, in others, part of the annual turnover is paid to the municipality. Furthermore, Finnish government has, until recently, allocated grants for large-scale water service investments; this can also impact the tariffs.

Considering the social issues of water pricing, such as affordability, Finland and the other Nordic countries form a somewhat special context. According to the Nordic Welfare Model, the public sector has a central role in ensuring the living standards of all citizens. In this sense, the differences in the pricing mechanisms of water between different income groups, consumer types, regions and generations are not as emphasised as in the international discussions (see e.g. OECD, 2002).

In general, water prices in Finland have been increasing because of investments in infrastructural rehabilitation and tightening demands on water and wastewater treatment. The pressures to increase prices can be expected to continue growing. For municipal decision-makers, this is a sensitive topic because of anxieties regarding public opposition.

The empirical part of this study consists of 74 interviews in 11 different Finnish municipalities (populations ranging from 8000 to 105,000). We conducted the interviews in Finnish as street surveys in the vicinity of the town centres between 18 June and 17 September 2013. We had not decided the number of interviewees in advance, nor did we have exact criteria for the interviewees. The aim was to get as rich research material as possible; we interviewed water utility customers, people using their own wells, young people, old people, people living in their own houses, and people living in rented apartments.

Initially, nearly all people we approached were hesitant about participating in the interviews as they felt that they did not possess enough knowledge or strong enough views about water services. They responded, for example, "I don't understand anything about this"; "This is a totally strange topic for me", and "Oh no. I'm completely the wrong person to answer". However, we were able to convince most of them that all contributions are valuable for our research and that we are not looking for specific knowledge. At the end of the interviews, many actually mentioned that the interview was interesting for them as it got them thinking about water services which is important but easily taken for granted. In this sense, it can be argued that we managed to get a rather interesting and rich sample which includes views from those who do not foster particularly strong views or opinions about water services.

The procedure we employed can be characterised as semi-structured, as certain themes were covered in each interview; however, the actual wording of questions differed depending on the context. The themes included water pricing, tariff structures, and shareholder returns. The starting point of this research was to explore people's ideas and views about water pricing. One key question concerned the *appropriate* or *reasonable* price for tap water. In Finnish, the term used was '*sopiva*'. A representative translation of *sopiva* into English seems to be lacking. According to the MOT Online Dictionary, *sopiva* can be understood, for example, as suitable, fit, suited, apt, reasonable, appropriate, becoming, correct, proper, fitting, convenient, or 'the right size'. Based on the actual responses, however, we maintain that in the context of pricing, *fair* represents the idea most coherently.<sup>2</sup>

This research approach can be described as data-driven. The research started and the empirical part was conducted with the idea of *sopiva* in mind. After reading the literature on pricing, we found resonance with the theoretical concept of *price fairness*, which is discussed in the next section.

### CONCEPTUALISING FAIR PRICE IN WATER SERVICES

Let us then turn to conceptualising fair price in the context of water services. We begin with a general discussion of the literature regarding fair pricing, which largely meets the needs of this research. However, the concept in question involves certain sensibilities; if the problem is defined too narrowly, the sensibilities that are, as we will claim in this article, particularly important to water pricing will be lost. Thus, we try to understand the systemic nature of the problem and operate in such a way that maintains those sensibilities. Accordingly, the concept of fair price in this article gets the theoretical stance from the elements from three different approaches: systems theory (e.g. Meadows, 2008; Luhmann, 2004), the ethics of economics (e.g. Sen, 1988; Brennan and Eusepi, 2009; Dutt and Wilber, 2010), and economic humanism (e.g. Schumacher, 1973; Sivaraksa, 2009).

#### Fair price in general

To put it briefly, a price is fair if people feel it is 'okay'. It is then both *acceptable*, as defined by personal terms, and *just* in a societal sense. An unfair price, in turn, violates social norms in one way or another (Bolton et al., 2003; Maxwell, 2008a: 6-10; Maxwell and Comer, 2010). While a 'bad deal' caused by an excessively high price is often regarded as unfair, this does not imply that a low price will necessarily be thought of as fair. For example, when the price is very low, it may be perceived to represent inequality and thus violate social norms (Xia and Monroe, 2010). According to Maxwell (2008b), a fair price has a social utility that is independent of the economic utility of a low price.

Sometimes a fair price and an expected price are considered to be equivalent. Sudden variations can therefore be perceived as unfair because the price loses its predictability. The same can be said of unexpectedly added fees, no matter how low the amount (Maxwell, 2008a: 50-51). This notion may have significant relevance in water services because of the pressure to increase prices due to the growing investment needs.

Fairness in pricing is not limited only to prices per se but also appears to be strongly related to the behaviour and procedures of an organisation. Fairness matters even though the transaction between a customer and a seller can be impersonal and proceed according to rational processes. If the perceived procedure of a seller is found fair, people regard the outcomes more positively (cf. van den Bos and Wilke, 1998; Ferguson and Ellen, 2013). For example, social capital of, and trust in, an organisation are put to a test during price increases. If an organisation has followed social norms and strengthened trust as a result, price increases are accepted more easily (Xia et al., 2004). Moreover, price increases are

<sup>2</sup> In Finnish, the word *fair* could not be used as it translates into *reilu*, which can, especially in the context of prices, also be interpreted misleadingly as hefty or generous.

found to be fair if an organisation is faced with increasing costs (Kahneman et al., 1986), but as Maxwell and Comer (2010) remind, an organisation must give an explanation that is socially acceptable for the rise in price to be considered fair. Of particular interest to this argument is the fact that it is not enough to give solely techno-economic reasons for price increases; an explanation should be socially acceptable in order to be considered fair.

Furthermore, if the price of a good or a service does not violate one's perception of fair price, the relationship between a seller and customer strengthens. On the whole, being 'fair' is very similar to being 'trustworthy' – in both cases, the participants meet expectations by following social norms (Maxwell, 2008a: 103). The importance of social norms cannot be overstated, as interpretations of fairness are strongly based upon emotional considerations. Social norms are not verbally formulated, but they are still there, acting as the boundaries of what is appropriate, acceptable, speakable, and thinkable. They are not permanent but vary through times and contexts; people have certain types of ethical values and ideas of fairness that may change over time and space, more or less predictably. While social norms are founded on an ethical basis, they help the parties in a given exchange coordinate their behaviour; people respect the rules when they see that being respectful is effective (Sivaraksa, 2009; Dutt and Wilber, 2010: 78). To summarise, following social norms leads to appreciation that can also support an organisation through difficult times.

### **Fair price at the macro-, meso- and micro-levels**

At the macro-level, there is a shared idea in society of what the fair price of water is, even though the actual price levels and pricing structures are not known. This shared understanding is based on the current paradigms, the set of values and beliefs defining how the world should work (Elster, 2007: 353; Meadows, 2008: 162-163). Furthermore, Sen (1988: 1-2) argues that economics should be motivated by ethical considerations, because economics is supposedly concerned with real people who cannot avoid self-examination and reflection on the central ethical question, "How should one live?". This is why emotional and ethical dimensions should not be ruled out in economics (Sen, 2009: 188).

At the meso-level, the question of the fair price of water is connected with a cognitive relationship between service providers and customers, which goes beyond purely monetary issues to emotional ties, thereby involving aspects of trust, affection, equality and fairness. Citizens are willing to obey social norms and accept pricing policies if others, including management and their fellow citizens, also obey the norms. Honesty pays off. Such emotional ties form the core of how people perceive water pricing (cf. a psychological tax contract by Frey and Feld, 2002; Feld and Frey, 2007).

In turn, a fair price of water at the micro-level can be defined as individual transactions between a service producer and customer. Nonetheless, the fair price of water combines the ideas of both personal and societal standards – the social component of fairness significantly modifies and moderates the personal component (see e.g. Maxwell, 2008a: 6; Maxwell and Comer, 2010). In this case, each person can decide how to weigh his or her personal and societal dimensions of price fairness. Similarly, each person can decide how to weigh the relationship between social dimensions and the financial realities of water services.

## **RESEARCH RESULTS**

Next, we will turn our attention to the empirical findings and their analyses. We present extracts from the interviews to demonstrate the views and expressions of the informants and to make our analysis more transparent to the reader. The interviews were conducted in Finnish and the excerpts were translated into English by the authors. The aim is not to discuss situations in particular towns or to pinpoint certain people; thus, the extracts have been made anonymous. All changes and additional information clarifying the context are presented in square brackets. The interviewees are distinguished by code names consisting of a letter indicating the town (A-K) and number indicating individual.

### Fair price – Connections with benefits of water

We started the interviews by asking the informants what they considered to be a fair (*sopiva*) price for water. As expected, replying to this question was not straightforward or easy. For example, in the words of one of the interviewees: "[v]ery difficult to say. I've never thought about it" (F2) This question, however, acted as an opening to interesting discussions regarding the many ways fair pricing can be approached.

Generally speaking, feelings of mutual responsibility and fairness seemed to be essential when defining a fair price of water on the micro-level. One interviewee, for example, described a deal made between her father and the water utility decades ago. The provisions of the deal were considered just for both parties. The institutional structure was thus built between the customer and the utility, which was contractually visible but invisible relative to social norms. The interviewee, however, felt that due to some changes in the conditions, the actions of the other party were violating social norms. From her point of view, the action of the water utility was unfair because it was about to change provisions without negotiations and mutual consent.

I'm an exceptional case as for the time being water is free to me. (...) When they originally built the water intakes, pumps and pipes into our field, we got free water as compensation and they built pipes on our property. I just made a plea to the municipality who now wants to cancel this deal. They don't take water there anymore but the pipes are still in the fields. (B5)

During the interviews, it became obvious that the price of water is related to many complicated factors, which makes the valuation difficult. One factor complicating the definition of a fair price for water is the embedded nature of water services in mundane activities and practices. One does not have to consider acquiring water services every time a tap is opened or the toilet is flushed; they just are there, making them different from many other daily consumer goods, such as foodstuffs. Furthermore, little attention is paid to actual consumption, which is one of the key components of water pricing.

Consuming water provides benefits (e.g. social and health benefits related to improved hygiene) and comfort, which are hard to define and evaluate. It serves as a part of larger systems that are far more than the sum of their individual parts; this makes it impossible to trace the benefits of water services. In other words, water serves larger purposes in human lives, but it is almost impossible to see the full impact of water services and account for this in water pricing.

When asked what the fair price for water could be, the following responses were given:

No idea. We bathe in it. [Swearing], it cannot cost many cents per litre. (A10)

We have to consider that water is also used for washing. In Finland, we use good water for everything. Maybe we should have some public wells with not so finely purified water that you could use for watering. Because that is expensive. This shows our true wealth. We can flush the toilet [with clean water]. I wonder if anyone has considered having separate systems. (D5)

[Water] is expensive. Or it depends on how you use it. We have small kids and we use a lot of water. (F2)

[Water is used for] hydration, washing up, cooking. And the same water that we drink is used to water the missus's flowers. It doesn't make any sense. But I wouldn't want two systems either. To have two sets of pipes. (I1)

I don't even know what the price is [in our municipality]. But people would not waste water if it was high enough. In supermarkets, it costs over one euro per litre. Maybe [a fair price] would be about some tens of cents per litre taking into consideration that you flush the toilet, shower... (C1)

These excerpts illustrate the complexity of defining a fair price for water. Water is used for many purposes, and in many cases, these are not valued equally. However, if water is only used to do the laundry, it would be relatively easy to define a fair price based on the value of getting clean clothes. As

another example, water can play an important part of a food production process. From the point of view of a company working in the food industry, a fair price is easier to define by using a top-down analytical approach. To summarise, it is difficult to define the value of water because of how difficult it is to value the larger systems to which water contributes.

Moreover, water benefits human well-being, as it helps to ensure that certain negative events will not happen. Thus, many of the benefits of water have a significantly different value creation logic than many other commodities. As it is hard to observe non-action, it is difficult to define a value for avoidance; it comes to mind usually only when such an invisible thing becomes visible for one reason or another. As an example, one of the interviewees had "just read in a newspaper about Palestinians this morning... water gives cleanliness, healthy life..." (B4). Water seems to have a dimension of avoiding negatives, which is why the logic of supply and demand is clearly insufficient to face the sensitivities of a fair price interpretation. This emphasis leads us to next consider fair price-related issues in the context of water consumption.

### **Fair price – Connections with consumption and tariff structure**

Certainly, when the fair price of water is discussed, it is impossible to ignore questions related to water use. Based on the interviews, this is an issue that provokes strong feelings. Although Finland has plenty of water resources available, people still seem to feel very strongly about wasting water. Even if there is no actual need to save water, it is still perceived as wrong to use it excessively. Again, it seems that the question is not just about water conservation per se but about how one should live and consume in general, which indicates that people tend to think of water-use-related questions at the macro-level. Interviewees' comments imply that water consumption at both individual and societal levels should be reasonable to be sustainable. However, there seems to be certain technological obstacles making more sustainable water consumption habits undesirable.

But here they irrigate ski trails using purified water, even though the lake is only a kilometre away. [What a] waste. Purified water! (F1)

I've understood that it is also a problem that people have started saving water as the pipes need water. In Western countries water is wasted. It doesn't make any sense to splurge purified water. (F9)

The excerpts above illustrate macro-level considerations, as they reflect the appropriate ways of life. As discussed, people have strong feelings regarding reasonable water consumption. Thus, they also have firm conceptions about the way water utilities should act to encourage reasonable consumption and align with the moral norms. However, in addition to the above-mentioned technological obstacles, the logic of water utilities' income generation contradicts this, as it would make sense to sell more water to get more income. Our interviewees recognised this contradiction and criticised it:

[The local energy company] is sucked dry and the same applies to the [water utility]. Just at the turn of the year, there was a feature saying that people have saved water and now there is not enough income and they have to raise prices. (D2)

It's against common sense. It would make more sense to have incentives for the opposite [to save water] and they would think about other ways also. (K1)

According to our interviewees, water utilities communicate almost entirely through a water bill, which is why billing procedures are an important, tangible connection between water utilities and their customers. Regarding the technical content of a water bill, people perceived it to be fairer if the volumetric part of a bill was stressed more than the fixed part. In this way, people would have an incentive to pursue reasonable lifestyles.

Once when entering a flat, the air was hot and moist, and then we found out that the person living there fills the bath tub with hot water [to heat the flat]. I don't want this to happen. Everyone should use their own share and not be forced to pay for other people's water. (F1)

Yes, yes, [water charge] should be based on consumption. I pay 40 Euros per month for me and my son. And I do the dishes by hand. Others splurge more, others less. (A10)

However, the interviewees seemed to also understand fairness from the water utility point of view. Although for the customer it would feel fair to only pay a volumetric fee based on their consumption, they understand that water utilities have fixed costs that are independent of the actual consumption. To put it another way, the interviewees' comments imply that the availability of the water supply infrastructure is valuable whether the water is consumed or not, which is why the fixed part of a water bill is justified.

It is reasonable to have some kind of fixed charge. If there's a house somewhere distant and they only use a few litres, well, then the costs [for the water utility] can be much higher. After all, there are costs even if there is no water usage. (I6)

The current [tariff] is reasonable. After all, it has to cover costs. (D8)

As these and other excerpts have highlighted, it is insufficient for water utilities to regard their customers solely as end receivers of their production process. Instead, a more humane, caring and open approach is called for. Furthermore, water pricing is not just about pricing water or water services, but it is a crucial way of building and strengthening relationships between water utilities and their customers, and even more widely between the public sector and citizens. It is therefore interesting to take a closer look at how the fair price of water reflects the municipal economy.

### **Fair price – Connections with municipal economy and shareholder returns**

In all of the municipalities in which we interviewed people, water services are provided by a municipally owned water utility. Through this ownership, municipal decision-making significantly impacts the economics of water utilities. From the point of view of this research, it is interesting that revenue based on the customer fees can be directed to municipal activities that are not in any way directly linked to the water services. This creates an intriguing dimension for the consideration of fair price because there are connections to municipal economics, and people have a variety of experiences regarding the fairness of municipal decision-making, as can be seen from the following excerpts:

But it is funny, the money collected for the maintenance of networks, that you've actually collected too much money, and then you have to use it for something else. But it doesn't feel smart either that the municipality makes a departmental budget that it needs to slavishly follow, so that if one department would have extra money, it could not be transferred to the other even if they would desperately need it. (I1)

[It is acceptable to use revenues from water] if there is some extra left, so that it is not at the expense of water services. And the water utility should have a small fund. If [the water utility] is a total moneymaker, then the water fees should be reassessed. (B9)

People did not only approach fair price through the water utility or water as a product, but they also discussed the way the water fees they had paid are allocated in the municipality. In this sense, the definition of fair price was based on the reasonability of municipal economics, transparency, solidarity and flexibility. The interviewees also used descriptions such as fair game, developability, equity and justice. An important aspect was that resources should be allocated flexibly depending on the varying needs. However, the interviewees also emphasised that the larger system, i.e. municipality, should not be favoured in such a way that it could endanger the vitality of the subsystem (in this case, the water utility).



This notion brings us closer to the question of shareholder returns, which was one of the most interesting and passionate topics of discussion in the interviews. It is interesting to note that shareholder return, per se, was not considered good or bad. Rather, opinions were based on experiences of underlying political processes and municipal services. Among those who perceive these to be reliable, hardly anyone had an objection to shareholder returns.

Better this way than to use it for something completely [different]. After all, we choose the decision-makers who aim for a common good. It is better, that it is used for a common good. It is OK, as long as water services are working. (I6)

It kind of depends on how you use the money. If you use it, for example, for services benefitting children, then it would be absolutely acceptable. In [our town] we don't really have anything else than a basic playgrounds for kids. (G1)

Well, it doesn't really matter to me as long as they use it for something common, not for anything useless. Municipalities have to do with so little funds. It doesn't matter, as they are common funds after all. (F3)

I would prefer fair game. Open game. Municipal enterprises should be developable so that they are not sucked dry. To my understanding, these enterprises have constantly increasing pressures to make more money. Profit is not used to develop water business, instead it is used for something else. Enterprises cannot develop as they are sucked dry. (D5)

These comments indicate that social norms play an essential role when questions of shareholder returns are considered; shareholder returns were viewed positively if the municipal decision-making was perceived to obey social norms. Discussion focused on municipalities working for the common good. Furthermore, there was compassion towards the dire economic situation of municipalities.

There were also those who were against shareholder returns, arguing that it blurred fairness and transparency. These people lacked trust in municipal decision-making. Thus, shareholder returns and allocating funds to other services were not considered fair game.

Who's the owner? That's me. It's putting money from one pocket to the other. I've never understood the logics in having such a high price that by the end of the year you have extra money. Fees should cover the costs. And this money should be ring-fenced, so that you don't give 70 000 [Euros to a local sports team]. It should be ring-fenced so that the water utility would use it to renew main water pipes. (F9)

Yes, this is a good question. I think that one should not do these [shareholder returns]. It should be based on the matching principle. Of course, raising the tax rate is also problematic. As long as they don't use [shareholder returns] to raise fees for municipal managers or pay for their leisure trips. (B4)

It is OK if it is used for something useful, for example, welfare stuff or health care. But not for the entertainment of management. (A5)

It should be ring-fenced. They don't renew sewage networks, claim that they don't have the money for it, when at the same time there are four broke municipalities that spend money on whatever. There [pointing at a construction site of an underground parking facility] the money goes. Megalomania of the decision-makers! (D3)

If we pay water fees, [the money] has to be used for [water services]... [The local energy company's] stuff, they are just pouring money into [local sports team]. Contracts are secret even though they are using tax payers' money. (F1)

Therefore, the fair pricing of water is associated with trust in the wider context of public and municipal services as well as decision-making. Trust towards the water utility alone is not enough. The interviewees' comments clearly demonstrate that this trust is built on negotiating and following social norms. If the social norms are violated in one issue, it will weaken trust related to other issues as well.

In summary, water pricing should be such that it bears public scrutiny and is perceived as just. Municipalities should, through pricing policies, create an operating environment for water utilities that enables viability. Because the fair price of water has strong connections with obeying social norms at the water utility and municipal levels, we will next shed more light on this issue.

### **Fair price – Connections with behaviour and municipal strategy**

Bearing in mind the previous points, violating social norms builds distrust and makes people focus more on problems and negative aspects. People begin to anticipate new disappointments and protect themselves by resisting development projects. Moreover, it also affects how people feel water services should function. When distrust grows, people have less understanding and sympathy for contradictions in current policies.

For example, one interviewee had job-related experience with a water utility acting inflexibly. He felt that the water utility was abusing its monopoly. Furthermore, he regarded it as unfair that the water utility does not represent the world view and strategy of the municipality:

At my workplace, we are trying to sort it out. [The water utility] has a bad reputation. They are acting villainously in a monopolistic position. They are charging us full fee for wastewater even though water is vaporised in the production process. This is why we are building our own wells in the food industry. We meet regularly and water is discussed in negative terms. But it is not the price that matters. (D4)

The same interviewee continues:

[The local water utility] is trying to make revenue. And the town is trying to foster an entrepreneur-friendly image. (...) The water utility should follow the town ideology. Now they are just doing their own things. The [local energy company] is involved in community projects, but the water utility is just plain rude. I've been involved in these projects and when we contact the water utility, they are rude. Their operations should align with the town strategy. The water utility has managed to water down and smear the town strategy. The town management should be more competent. They should shape up in ownership steering. (D4)

As the excerpts illustrate, when people assess social norms, they do not look at the water utility alone but see it in a wider context. The water utility and its activities are assessed as part of the municipality and public services.

In the excerpts above, the rudeness of the water utility towards their customers was highlighted. In this case, the interviewee felt that the pricing principles should be negotiable and have legitimate grounds. As he pointed out "it is not the price that matters" (D4). This same opinion seems to apply for most of the interviewees. The question is mainly about attitude and the way things are handled. It follows that rude, unfair behaviour towards people is likely to create a negative atmosphere and distrust, which again affects how people see pricing policies and water services in general. Utilities should make the customers feel like they are respected and viewed as more than just passive receivers and payers for a service. As the questions of a fair price seem to have strong social dimensions, we will next explore this in the light of water as a product.

### **Fair price – Connections with product quality and responsiveness**

From the perspective of fair price, water can be undoubtedly thought of as a product. If people have negative experiences or other hesitations related to water services, then they tend to assess water pricing more critically. Water is then assessed as a consumer product. The quality of this product is an especially sensitive topic, as consumers do not really have alternatives. If they are not satisfied with the quality, they cannot change the service producer, as is the case with many other consumer products.

According to one interviewee, fair price of water "depends on its quality" (H3). Furthermore, when the interviewees were asked if they knew how much the water fees were at the time, the following responses arose:

Unreasonably much in relation to quality. If it would be better, I could pay more. (...) We have actually thought about moving to [another town] because of the water quality. Price itself doesn't matter. (J2)

Price doesn't really matter. Except in places where the water is of bad quality. (J3)

[Current price] is reasonable. Then again, during summertime, it is a bit bad, tastes like swamp water. (F8)

I cannot say at all, because I consume so little. (...) But yes, good water is worth paying for. And the water is good here. (D1)

Based on the interviews, it seems that the attitude of the water utility and municipality towards water quality is a critical factor in relation to social norms. People want to be ensured that the utility and municipal officials do their best to provide safe and good-quality tap water. This also means that communication about the water quality needs to be open and transparent. For example, one of the interviewees described her feelings:

It feels that you are not allowed to talk about these things. You are not allowed to complain [about water] because everything is so good. But I am the customer, why wouldn't I be allowed to complain? In our family, we don't drink tap water; instead we buy water or get it from my sister [living in the next town]. But it is hard. And it feels bad as there's so much plastic waste and our municipality doesn't even have a recycling system for plastic. (J2)

The same interviewee continued:

But why is there no public debate about this? Is it not allowed to talk about it? Why don't they do anything? There have been many stomach diseases in [our town]. Some of them are probably caused by the tap water. Our kids have not been sick at all and people are always wondering about it. But it is because we don't drink tap water. I prefer that my kids don't even bathe in the tap water. (J2)

When the same interviewee was asked whether she thought that the situation could be improved by having someone other than the municipality provide the service (i.e. a private company or a consumer cooperative), the reply was:

It could be a consumer cooperative. They would probably be interested in really changing things, unlike the municipality. (J2)

Unresponsiveness from the service provider was seen as violating social norms, especially when customers feel that the municipality and the utility do not take water-quality issues seriously and are not really interested in the well-being of citizens.

In general, the interviews support the idea that the concept of a fair price is not only about the actual price but that fairness is assessed in relation to the overall operation of the water utility. One decisive factor is how the utility has managed to build social capital and trust with customers as well as their other stakeholders. For example, trust was built when the water utility "apologised that water was foaming when the pipes were being renovated and air had accidentally gotten into the pipes" (J3). In this case, the interviewee did not experience the problems with the water quality negatively because of the open communication. Instead, this incident proved to strengthen trust as the attitude of the water utility suggested that they cared about their customers and gave their best for people's well-being. In another case, trust was created by the municipality that was "building a network even to the backwoods" (E1). This example highlighted that the municipality was acting for the common good even when it was not economically efficient.

## DISCUSSION

Eventually, water pricing cannot be addressed solely as a mechanical top-down design problem. As water utilities operate for public interest and common good, the ethical side and perceptions of pricing should not be ignored. Despite this fact, academic discussions and problem definitions of water pricing have been focused mainly on instrumental aspects. In this study, we have discussed the human side of economics in water services in terms of fair price.

The results of this research describe that valuation of water price by purely monetary terms does not do justice to the complexity of the issue. However, it is still possible to understand how people construe a sense of fairness in water-pricing policies. In this respect, our theoretical construction of fair pricing proved to be a useful explanatory framework. It helped to explain people's mental structures and shared understandings with regard to water pricing. The analysis showed that people think of water pricing in relation to issues at macro- and meso-levels to a large extent, which can be explained by the fact that a majority of people do not have any contact with the water utility except to pay the bill.

It was striking to see how fairness plays a crucial role when perceptions of water policies are constructed. It is evident from the results that the water utility customers are not just rational consumers of goods but people with emotional ties to the water utility and municipal decision-making. However, a word of caution is in order here. Despite the fact that in this research we have talked with water utility customers to discover their ideas regarding water services and to advocate taking their views more seriously, this does not mean that every want or whim of each customer needs to be executed or that the customers are always right. The question is not of simple customer orientation but of a more profound and systemic idea about serving the public interest or common good. This is built on the collective values, attitudes and emotions that we have tried to uncover through the concept of fair pricing.

To service people, focusing on production aspects or good dominant logic is insufficient (Vargo and Lusch, 2008). To fulfil public interests, utility policies and institutional settings should align with shared social norms. In light of the results of this study, these issues should be covered in planning for water services. This became particularly pronounced when the interviewees considered the function of water services as a part of the larger whole, in other words, as a part of the well-being of the community.

In this sense, an interesting observation is that people seek comparability in the activities of different municipal actors. For example, if the ownership steering of a local energy company is perceived unsustainable, then it is expected that the same will eventually apply to the water utility. Similarly, the way one municipal actor treats customers impacts the expectations people have of the other municipal actors. Municipal activities seem to have effects across the sector boundaries, thus calling for systemic and integrative thinking in the planning and managing of services.

To illustrate the importance of shared social norms, for example, there seems to be an inherent contradiction in the tariff structures. Social norms seem to support weighing volumetric fees based on water consumption, whereas from the point of view of engineering and economic realities, it makes sense to stress the fixed fees. Furthermore, the logic of water utilities' income generation seems to contradict people's ideas of reasonable water use. When planning for water service policies such as pricing, these contradictions should be considered. One must strive to make decisions and act in ways that are socially acceptable so that they can be considered fair. Thus, our findings support the claim that perceived procedures of a service provider affect how people regard outcomes (cf. van den Bos and Wilke, 1998; Ferguson and Ellen, 2013).

This research took a systemic and bottom-up approach for investigating water pricing. It is somewhat unusual, as water utilities operate as monopolies and typically rely on relative bureaucratic procedures and hierarchy, which make them, in principle, a relatively closed system. The customer's task then is solely to receive a produced service and pay the bill. As Luhmann (2004: 8) asserts,

although a system is operationally closed, it is still cognitively open. The approach we used attempts to understand the viewpoints of the end users as humans, which is in line with Luhmann's viewpoints, as he argues that the typical values of public services and water services – such as equity, justice and reasonableness – do not enter water pricing from the outside but are constructed via internal processes of the system (Luhmann, 2004: 12). Therefore, if water services are to be developed in a sustainable manner, the role of customers and citizens in the water services' value creation processes must be rethought.

## CONCLUSIONS

Based on our research, we present three key messages to take into consideration in operations and development of water services:

1. In general, the fairness in water pricing and water services is formed through obeying social norms. However, social norms are neither permanent nor hierarchically determined but are formed through experiences and mutual value-creation processes. They reflect not only in the context of pricing but also in all operations of water utilities and municipal decision-making procedures. In this respect, people want to be seen as a significant part of the value creation and fair determination processes.
2. People appreciate fairness in the operation of water utilities. If operations are considered to be fair, the general attitude towards a water utility is confident and exceptional and harmful events are regarded more sympathetically. This suggestion is strongly supported by the theoretical basis of our research. However, fairness seems to be an emergent property of interactions and experiences between customers, water utilities and, finally, municipal politics.
3. Considering the very purpose of water services, there seems to be a definite need for a new paradigm, which has an interest in developing operations from the point of view of serving people. Thus, the new paradigm will exceed the limits of the dominant production-based logic, thereby enabling water services to be viewed in a new light and the problems to be defined differently.

## ACKNOWLEDGEMENTS

Financial support for this study was received from a grant funded by The Foundation for Municipal Development, and a grant funded by Alfred Kordelin Foundation.

## REFERENCES

- Ayoo, C.A. and Horbulyk, T.M. 2008. The potential and promise of water pricing. *Journal of International Affairs* 61(2): 91-104.
- Bolton, L.E.; Warlop, L. and Alba, J.W. 2003. Consumer perceptions of price (un)fairness. *Journal of Consumer Research* 29(4): 474-491.
- Brennan, G. and Eusepi, G. 2009. Value and values, preferences and price: An economic perspective on ethical questions. In Brennan, G. and Eusepi, G. (Eds), *The economics of ethics and the ethics of economics. Values, markets and the state*, pp. 14-31. Cheltenham: Edward Elgar.
- Burrill, A. 1997. *Assessing the societal value of water in its uses*. Sevilla: Institute for Prospective Technological Studies, Joint Research Centre of the European Commission.
- Diakité, D.; Semenov, A. and Thomas, A. 2009. A proposal for social pricing of water supply in Côte d'Ivoire. *Journal of Development Economics* 88(2): 258-268.
- Dutt, A.K. and Wilber, C.K. 2010. *Economics and ethics. An introduction*. Hampshire: Palgrave Macmillan.

- EEA (European Environment Agency). 2013. *Assessment of cost recovery through water pricing*. Technical Report, No. 16/2013. Luxembourg: European Environment Agency.
- Elster, J. 2007. *Explaining social behavior. More nuts and bolts for the social sciences*. Cambridge: Cambridge University Press.
- Feld, L. and Frey, B. 2007. Tax compliance as the result of a psychological tax contract: The role of incentives and responsive regulation. *Law & Policy* 29(1): 102-120.
- Ferguson, J.L. and Ellen, P.S. 2013. Transparency in pricing and its effects on perceived price fairness. *Journal of Product & Brand Management* 22(5/6): 404-412.
- Finnish Water Services Act. 2001. [www.finlex.fi/en/laki/kaannokset/2001/20010119](http://www.finlex.fi/en/laki/kaannokset/2001/20010119) (accessed 12 January 2015)
- François, D.; Correljé, A.F. and Groenewegen, J.P.M. 2010. Cost recovery in the water supply and sanitation sector. A case of competing policy objectives? *Utilities Policy* 18(3): 135-141.
- Frey, B.S. and Feld, L.B. 2002. Deterrence and morale in taxation: An empirical analysis. CESifo Working Paper No. 760, August 2002. Social Science Research Network. <http://ssrn.com/abstract=341380> (accessed 14 January 2015)
- Gaur, S. 2007. Policy objectives in designing water rates. *Journal of American Water Works Association* 99(5): 112-116.
- Griffin, R.C. 2001. Effective water pricing. *Journal of the American Water Resources Association* 37(5): 1335-1347.
- Hoekstra, A.Y. 1998. Appreciation of water: Four perspectives. *Water Policy* 1(6): 605-622.
- Hoffbuhr, J.W. 2004. Water's peculiarities. *Journal of American Water Works Association* 96(10): 6-6.
- Jones, T. 1998. Recent developments in the pricing of water services in OECD countries. *Water Policy* 1(6): 637-651.
- Kahneman, D.; Knetsch, J.L. and Thaler, R.H. 1986. Fairness and the assumptions of economics. *Journal of Business* 59(4): 285-300.
- Luhmann, N. 2004. *Law as a social system*. New York: Oxford University Press.
- Maxwell, S. 2008a. *The price is wrong. Understanding what makes a price seem fair and the true cost of unfair pricing*. New Jersey: John Wiley & Sons.
- Maxwell, S. 2008b. Fair price: research outside marketing. *Journal of Product & Brand Management* 17(7): 497-503.
- Maxwell, S. and Comer, L. 2010. The two components of a fair price: Social and personal. *Journal of Product & Brand Management* 19(5): 375-380.
- McNabb, D.E. 2005. *Public utilities. Management challenges for the 21st century*. Cheltenham: Edward Elgar.
- Meadows, D.H. 2008. *Thinking in systems. A primer*. London: Earthscan.
- Mohayidin, G.; Attari, J.; Sadeghi, A. and Hussein, M.A. 2009. Review of water pricing theories and related models. *African Journal of Agricultural Research* 4(13): 1536-1544.
- Organisation for Economic Cooperation and Development (OECD). 2002. *Social issues in the provision and pricing of water services*. Paris: OECD.
- Rogers, P.; Bhatia, R. and Huber, A. 1998. *Water as a social and economic good: How to put the principle into practice*. Global Water Partnership, TAC Background Papers No. 2. Stockholm: Swedish International Development Cooperation Agency.
- Rogers, P.; de Silva, R. and Bhatia, R. 2002. Water is an economic good: How to use prices to promote equity, efficiency, and sustainability. *Water Policy* 4(1): 1-17.
- Schumacher, E.F. 1973. *Small is beautiful. Economics as if people mattered* (Reprint edition). New York: Harper Perennial.
- Sen, A. 1988. *On ethics and economics*. Oxford: Blackwell Publishing.
- Sen, A. 2009. *The idea of justice*. Cambridge: The Belknap Press of Harvard University Press.
- Sivaraksa, S. 2009. *The wisdom of sustainability. Buddhist economics for the 21st century*. Kihei, Hawai'i: Koa Books.

- Stavins, R.N. and Olmstead, S. 2009. *Comparing price and non-price approaches to urban water conservation*. Discussion Paper No. 2009-01. Cambridge, Massachusetts: Harvard Environmental Economics Program.
- Thorsten, R.E.; Eskaf, S. and Hughes, J. 2008. Cost plus: Estimating real determinants of water and sewer bills. *Public Works Management & Policy* 13(3): 224-238.
- van den Bos, K. and Wilke, H.A.M. 1998. When do we need procedural fairness? The role of trust in authority. *Journal of Personality and Social Psychology* 75(6): 1449-1458.
- Vargo, S.L. and Lusch, R.F. 2008. Why "service"? *Journal of the Academy of Marketing Science* 36(1): 25-38.
- Xia, L. and Monroe, K.B. 2010. Is a good deal always fair? Examining the concepts of transaction value and price fairness. *Journal of Economic Psychology* 31(6): 884-894.
- Xia, L.; Monroe, K.B. and Cox, J.L. 2004. The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing* 68(4): 1-15.

THIS ARTICLE IS DISTRIBUTED UNDER THE TERMS OF THE CREATIVE COMMONS *ATTRIBUTION-NONCOMMERCIAL-SHAREALIKE* LICENSE WHICH PERMITS ANY NON COMMERCIAL USE, DISTRIBUTION, AND REPRODUCTION IN ANY MEDIUM, PROVIDED THE ORIGINAL AUTHOR(S) AND SOURCE ARE CREDITED. SEE [HTTP://CREATIVECOMMONS.ORG/LICENSES/BY-NC-SA/3.0/LEGALCODE](http://creativecommons.org/licenses/by-nc-sa/3.0/legalcode)