

Executive Summary

Access to safe drinking water and wastewater services is essential for public health and well-being, but attitudes differ regarding how such services should be funded. In Ireland, the 2014 introduction of a domestic-sector consumption-based charging regime was met with public protests, leading eventually to the suspension of charges in 2016 and a subsequent recommendation by a parliamentary committee that they be abolished. Given that some form of domestic water charges exists in all EU countries and given that charges may still be required to comply with EU legislation, it is important to understand why the domestic-charging policy failed. This report argues that public opposition to domestic water charges was not generated by one single issue and presents five factors that it can be argued were influential:

1. *Opinions about water as a human right*

- A key claim made by the anti-water charges campaign was that water is a human right and that funding water services through general taxation is the only way to protect access to these services for all. The campaign appeared to interpret and communicate this to mean unlimited treated water delivered to homes for free.
- However, while water as a substance may be considered as free, its treatment and transportation are not. Wastewater services incur real and significant costs, which a general taxation model may not be able to deliver over the longer term. This has certainly been the case in Ireland, where investment in water services has long had to take a back-seat to more politically-urgent areas such as health and education.

2. *Levels of public trust*

- It is clear that public trust in government and public institutions, both internationally and in Ireland, was damaged by the fallout from the economic crisis. Lack of trust and perceptions of fairness have implications for how accepting people are of government policies, and it is likely that this partly drove opposition to the introduction of domestic water charges.
- Among EU member states, public trust in national political institutions fell by 18% between 2007 and 2013, particularly in countries that were confronted with austerity measures imposed by external actors.
- This was especially evident in Ireland: between 2006 and 2014, levels of mistrust in the Irish parliament increased from 39% to 54%, peaking in Autumn 2010, when, of all EU-15 citizens, the Irish had the highest levels of mistrust in both their parliament and government.
- Efforts have been made to enhance trust through the establishment of the Public Water Forum (under the Water Services Act 2014) as an independent consumer consultative forum which addresses affordability issues, costs, communications /education and engagement.

3. *Personal values of water consumers*

- The personal values of those opposed to the water charges appear to have played a role in shaping their resistance. Strongly held views about the value of continued public ownership of Irish Water, for example, were taken seriously enough by the Expert Commission and the parliamentary committee for the issue to be the first one addressed in both of their reports.
- The actual value people put on water services can be influenced by the level of service they are accustomed to receiving. In the Dublin area, for example, where the opposition campaign appeared to be strongest, it has been 40 years since households have had to pay directly for water services. As a result, they may have taken it for granted that water is not something to be paid for directly and, so, any attempt to introduce direct charges would naturally be met with strong opposition.

4. *How the charges were framed by government and protesters*

- In environmental disputes, frames are generally centred around what the key issue is and how it should be settled.
- The government's predominantly economic and financial-based framing was driven, no doubt, by the very real demands of bringing the public finances back into line and to comply with the EU's Water

Framework Directive. However, its neglect of social concerns, such as poverty proofing the measure more clearly, may have inadvertently fed public resistance to the charges.

- The emphasis on social concerns amongst the protesters may, however, also point to an ‘activist-type’ mindset driving some of the anti-water charge campaigners, along with their framing of the use of civil disobedience tactics as necessary and acceptable.
- Whether the public viewed the charges as a potential loss or gain, especially for those households who had not been paying directly for water services for decades, is also relevant whereby research shows that people value a loss more than an equivalent gain. Such frames of losses or gains are not necessarily immune to change, as illustrated by the changing attitudes experienced by group-water scheme members over the years, thus showing the potential for a similar shift being achievable in relation to public water service customers.
- There is also some evidence that the framing and interpretation of water charges by the Irish public has been inconsistent, in that polls suggest people agree both with a right to water concept and also agree that everyone should pay something as it is a precious resource.

5. *Timing of the charges*

- The timing of the introduction of charges may have helped to fuel opposition in two ways. Firstly, there was the cumulative impact of contractionary national budgets from 2008 onwards, including service cuts, increased charges and taxes, falling income and high private debt. In this context, the water charges, coming, as they did, at the end of these measures may have been the last straw for certain people.
- The signs of recovery appearing from early 2014 onwards, and announced by government, may also have led to a perception that the charges were no longer necessary and so could be ‘safely’ resisted i.e. the economy was no longer in danger.

The report also examines how representative was the opposition campaign:

- Despite the anti-water charges campaign resulting in a dramatic policy reversal by the government, analysis of data suggests that the protesters only represented around 30% of all Irish households, at most, with the other 70% paying for water services as Irish Water customers, through group water schemes, or by privately funding their own wells and wastewater treatment.
- Exit poll data for the 2016 general election showed that fewer than one in ten voters (8%) cited water charges as the most important issue influencing their choice of first preference candidates; even amongst those voting for parties and candidates active in the anti-water charges campaign.
- This raises interesting questions regarding why the government was reluctant to persist with the charging regime and whether it would eventually have become accepted policy, as occurred with the previous introduction of domestic waste charges.

The factors driving opposition to the introduction of domestic water charges in Ireland appear to have been multiple and complex in nature, combining political and personal circumstances around the time of introduction as well as in preceding decades. Consequently, any future attempts to resolve them are also likely to be complex and time-consuming. The 2017 parliamentary committee report has recommended that the Irish Government must provide funding certainty for water services from general taxation (Houses of the Oireachtas, 2017, p.7) but it remains to be seen if, and how, this will be implemented. Any repeat of previous failures to invest adequately in water services will have long-term implications for competitiveness, economic growth and quality of life.

1. Introduction

Access to safe drinking water and wastewater services is accepted as being essential for public health and well-being but attitudes differ across Europe and internationally as to how such services should be funded. Prior to 2013, domestic water services in Ireland were funded through general taxation after the nationwide abolition of non-consumption-based domestic charges in 1997. The introduction of direct charges for water services in 2013 under the Water Services (No.2) Act was met with public opposition and protest, following which the charges were initially suspended and then recommended for abolition in 2017. As a result, Ireland will be the only nation in Europe where the majority of households does not pay directly for the water they use (McGuill, 2016).

This paper aims to provide insights as to why Ireland continues to be an outlier in respect of the funding of domestic water services from the central exchequer. It focuses, in particular, on the underlying factors that may have been influencing the public's response to consumer water charges and the government's eventual decision to abolish the charges. There has been some research¹ and much public discourse regarding how the political environment and the handling of the policy by successive governments contributed to the failure of the water charging policy. Therefore, this paper examines a number of other potential reasons for the policy failure. The paper begins with a summary of the European and Irish legislative context underpinning the funding of domestic water services. It then explores five factors that may have played a role in people's attitudes towards water charges:

- Contested views of water as a resource;
- Levels of public trust in government;
- Personal values regarding water services;
- How the water charges were "framed" by government and the public;
- Timing of the introduction of the charges.

The implications of these factors for the future provision of sustainable domestic water services in Ireland are then discussed, along with an exploration of the representativeness of the anti-water charges campaign. Finally, the importance of, and approach to, addressing the factors underlying the opposition to the charges is examined.

2. Funding of water services in Europe and Ireland

In the EU, the overarching policy tool for water management is the Water Framework Directive of 2000. The Directive aims for an integrated approach by combining the perspective of a right to water with the protection and management of water resources (van Rijswijk, 2011, p.116). The preamble to the Directive recognises the public and social values of water in the statement that "Water is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such" (European Union, 2000, p.1). However, it also recognises the economic perspective, stating that "The principle of recovery of the costs of water services, including environmental and resource costs associated with damage or negative impact on the aquatic environment should be taken into account". Member States can use economic instruments (such as tariffs and taxes) to do so.

This dual goal is further elaborated in Article 9, where Member States are to ensure, by 2010, that "water-pricing policies provide adequate incentives for users to utilise water resources efficiently and, thereby, contribute to the environmental objectives of the Directive". They are also to ensure an adequate contribution towards the recovery of the costs of water services from different water uses, including, industry, households and agriculture. Environmental organisations had pushed for full-cost pricing for all water supplies to be included in the Directive as a means of environmental protection but pressure from the agricultural and chemical sectors amongst others led to a weakening of this in the final version (Kaika, 2003, p.305; Page & Kaika, 2003, p.332). The European Parliament's agreed position was also in favour of full-cost pricing but Southern European socialist MEPs voted against it, arguing that Article 9 had a "market

¹ See Jollands and Quinn (2017) and Herne (2015), for example.

economy” orientation, was “fundamentally neoliberal”, and would place an economic burden on water consumers (Kaika, 2003, p.309-310).

Some critics echo this, arguing that the Directive does not give sufficient recognition to the social aspects of water services, offering instead a narrow perception of water as “a resource that can be transformed into an economic commodity” (Melo Zurita et al., 2015, p.171). However, full cost recovery is not mandatory – paragraph 38 of the Preamble states that the principle “should... be taken into account...” and, in Article 9, Member States are “permitted to take into account the social, environmental and economic effects of such recovery”. They may also exempt certain water uses from contributing to cost recovery but only if they can show that doing so will not compromise the achievement of the Directive’s objectives. Member States themselves have differing views on the nature of water services - some regard water as a public good, while others see water services as a commercial product, with resulting differences in ownership and management of water services and provision, including cost recovery mechanisms (van Rijswick, 2011, p.115-116). These range from direct tariffs or charges imposed on consumers to full-tax financing (Castelluci, 2015, p.3).

In Ireland, there is no explicit reference to a right to water in the Constitution and the country also abstained from the vote on the adoption of the UN General Assembly 2010 Resolution on the right to safe and clean drinking water and sanitation. Neither is there any legal right to basic water services in Ireland (TASC, 2012, p.6). Until the late 1970’s, the approaches to water services policy of successive governments in Ireland could be said to have recognised both the public and economic characteristics of water services. Domestic water services provided by local authorities were financed by means of water “rates” paid by households, calculated on the basis of the rateable value of the dwelling house. In rural areas, central government provided grant assistance as part of a programme to increase piped water supplies, usually by means of group water schemes or private wells. Members of the group water schemes then paid a (usually flat-rate) charge to cover the costs of maintaining the schemes (Hanke, 2003, p.212-213).

This system changed in 1977 when the Fianna Fáil party was elected to a majority government on a promise to abolish domestic water rates, with water service costs to be funded by increased indirect taxes and a “rate support grant” for local authorities, financed by government borrowing. However, following the election of a Fine Gael-Labour Party coalition government in late 1982, grant-aid was cut and local authorities were given the power to levy domestic water charges (Jollands & Quinn, 2015, p.172). A (flat-rate) local authority domestic-service levy was subsequently introduced in 1985; however, as the previously increased taxes were not reduced, there was public opposition to what was perceived as ‘double taxation’, viewing the proposed rates as unrelated to consumption and representing an unfair burden on the poor, particularly in the Dublin City area. As a result, the levy was implemented by most local authorities but not in Dublin city and county (CPA, 2015, p.6).

This situation persisted until 1994, when Dublin city and county was divided into four new local authority areas, all of which, apart from Dublin City, introduced a flat-rate water charge. Again, there were public concerns about double taxation and the prospect of increasing water prices and a period of public demonstrations, boycotts and court cases over non-payment followed. In advance of the upcoming general election in late 1997, the Fine Gael-Labour Party government passed the Local Government (Financial Provisions) Act, 1997 which, effectively, abolished domestic water charges for the country as a whole from 1 January 1997, a move widely regarded as an attempt to block anti-water charge election candidates (McGee, 2012). The cost of public-water services was now to be funded from the proceeds of motor taxation receipts. Through all of this, group water scheme members continued to pay directly for their water services. In addition, there was the gradual introduction of metering and volumetric billing for group schemes and over 80% of member households are now metered (National Federation of Group Water Schemes, 2016, p.1-2).

The OECD acknowledged that central government funding for all capital and current costs of household water provision in Ireland had the advantage of being relatively straightforward and easily understood, as well as avoiding capital and administrative costs for metering and charging. However, it also declared that the absence of charging and metering in Ireland not only gave households zero incentive to save, but also created inequalities between households (OECD, 2010b, p.73), a view echoed by the Irish Commission on Taxation who stated that those who did use water sparingly were, in effect, subsidising those who used it irresponsibly

(Commission on Taxation, 2009, p.15). There is also the view, taken by the OECD (2010b, p.73) amongst others, that government policy on water services since 1977 has reflected (and also perhaps compounded) water users' low awareness of the amount of water they use and the costs involved in supplying that water. During the "Celtic Tiger" economic boom from the late 1990s onwards, for example, there was no requirement for the thousands of houses built during this time to be fitted with water saving equipment (Zhao & Crosbie, 2012, p.3), let alone meters, although local authorities did benefit from a major income boost due to the imposition of a development levy on such developments (Jollands & Quinn, 2015, p.172-173). In Dublin, in particular, where it has been 40 years since the last comprehensive system of domestic water charges, as Scott (2003, p.2) points out, "a generation of people is growing up without realising that water is expensive to deliver".

Critically, there is also the situation that, since the majority of domestic water services are funded through the exchequer, such services compete with other areas of public expenditure such as health, policing and social welfare, which are arguably higher on the minds of the voters for the reasons stated above. This has led to constrained and variable year-on-year funding for water services and a significant under-investment resulting in ageing, poor-quality water infrastructure, for example, the average age of Irish water mains is between 65 and 85 years, compared to an EU average of 36 years. Approximately half the treated water is lost due to leakage from the distribution network and at least 180,000 properties are at risk of not meeting EU lead standards for drinking water (Irish Water, 2015, p.14). In Dublin, there is little or no spare drinking water capacity (Kelly-Quinn et al., 2014, p.1).

3. Introduction of domestic water services charges in Ireland

The first indications of a possible reintroduction of a domestic water services charge came in 2009 at the height of the financial crisis, in the Renewed Programme for Government of the Fianna Fail-Green Party coalition, with the proposal to charge for "treated water use that is fair, significantly reduces waste and is easily applied...based on a system where households are allocated a free basic allowance, with charging only for water use in excess of this allowance" (Government of Ireland, 2009, p.5). This was followed by a government decision to introduce a scheme of water charges in National Recovery Plan 2011-2014 (Government of Ireland, 2010a). This plan became the basis for the agreement in November 2010 of the EC-ECB-IMF "troika" financial support package (Government of Ireland, 2010b). It is notable that during this same period, the Irish government was involved in negotiations on the EU Water Framework Directive where, from the outset, it adopted an "opt-out" position in relation to Article 9's clause on recovery of water service costs (Kaika & Page, 2003, p.326) despite this being part of government policy. The Directive was formally adopted just one month after the financial support package was agreed.

A new Fine Gael-Labour government came into power in 2011 committed to implementing the remaining steps in the National Recovery Plan. Both parties while in opposition had opposed the introduction of water charges (and a domestic metering program) and it wasn't until 2013 that the Water Services (No.2) Act established domestic billing and a new semi-state company - Irish Water - which was to take over responsibility for the management of water services. In October 2014, after a public consultation process, Irish Water's charges plan was approved. This was based on volumes used and a free allowance (Irish Water, 2014). However, it was not long before the policy began to unravel as, following a period of nationwide protest, these were superseded by new charges announced in the Water Services Act, 2014, which placed a cap on bills and reduced the price charged for metered customers (CPA, 2015, p.8). The anti-water charges movement was initially centred around members of the United Left Alliance and other small socialist groups, as well as non-party elected representatives. It had a central message that "People already pay for water. This is another tax. It is a money-raising and privatisation ploy by the Government" (McGee, 2012). A series of public protests followed, mainly concentrated in the larger cities, followed by the formation of the "Right2Water" campaign in September 2014. This consisted of activists, citizens, community groups, trade unionists and political parties including Sinn Féin, Anti-Austerity Alliance (now "Solidarity"), People Before Profit and the Workers' Party, as well as other independent elected representatives. It called on the government to "recognise and legislate for access to water as a human right" and to "abolish the planned introduction of water charges" (Herne, 2015, p.6).

The public protests continued - including disruption of water meter installations - until, following a general election which resulted in a Fine Gael-led minority government supported by Fianna Fail through a 'Confidence and Supply' arrangement, a decision was taken in May 2016 to suspend domestic water charging pending a review of the system by an Expert Commission set up by the government (Expert Commission on Domestic Public Water Services, 2016, p.7). This ultimately resulted in funding of water services reverting to general taxation while "wilful wastage of water" was to be monitored and subsequently addressed by means of "incentives, levies and other measures" (Houses of the Oireachtas, 2017, p.7-9)

4. Factors influencing public attitudes towards the water charges

On the face of it, the anti-water charges campaign appears to have been instrumental in the eventual recommendation to abolish the charges. But what exactly was it about the charges or the Irish situation that generated this opposition, given that similar charges are in place in all other EU member states?

4.1 Factor 1: Defining water as a public or private good

One of the key arguments put forward by the Right2Water campaign was that water is a human right and so should be available to all without restriction. This view is part of the more general debate on whether water should be regarded as a public or a private (economic good), which, in turn, has implications for one's view on how the supply of water should be financed.

Water as a right / public good

Many believe that access to water services is a human right and governments have a responsibility to ensure it is "freely" available to all (OECD, 2003, p.19). The history of water as a human right stretches back millennia, with the Koran, for example, considering access to water a right of all persons, whether on private or publicly held property (Civic, 1998, p.437). Ancient Jewish law regarded drinking water from springs or streams as a gift from God and any attempt to commodify it or sell it as tantamount to desecration (Salzman, 2006, p.6-7). In 2010, the United Nations General Assembly declared "safe and clean drinking water and sanitation to be a single human right under international law" in its July 2010 Resolution (United Nations, 2010). The global water justice movement similarly believes that "water is the common heritage of all humans and other species, as well as a public trust that must not be appropriated for personal profit or denied to anyone because of inability to pay" (Sultana & Loftus, 2012, p.5-6). In Ireland, some political parties are also of the view that water is a public good (see Sinn Féin, 2015) and those opposed to water charges claimed that people's right to water was under threat from the new charging regime evidenced in statements such as: "The government's aim of treating water like any other utility (gas, electricity, etc.) should be a concern for all...water is not like any other good in that you cannot live without it and there is no alternative...[and] Ireland's established practice of paying for water and sanitation through progressive general taxation...is also the clearest, possibly only, method which is assured of vindicating the human right to water" (Right2Water, 2016, p.8-10).

The realisation of such a right to water depends on the on-going availability of a safe, secure and reliable supply of such services (van Rijswijk & Keessen, 2012, p.133). While over seventy percent of the earth's surface is covered with water, only 0.5% is available freshwater which must be sourced from rivers, underground aquifers, lakes, etc., treated to make it suitable for human consumption, stored and then distributed to where it is needed. Systems to collect and properly treat wastewater are also required (World Business Council for Sustainable Development, 2006). Given the limited amount of freshwater available globally, managing the demand for and consumption of this valuable resource is also essential, so that it is used in a sustainable manner with losses and wasteful usage minimised. According to the United Nations World Water Assessment Programme (2016, p.12), "Global water demand is projected to increase greatly over the next several decades; at best, available resources will remain unchanged. This will put a direct strain on economic development, and indirectly through social unrest and unhealthy ecosystems." Reliance on increasing supply to meet human demand is no longer an option, since it can involve the often-controversial transfer of water from rural to urban communities. It also usually means reducing the water supply available to support other species and habitats, the ecological and environmental value of which is another dimension to water.

Water quality is projected to deteriorate rapidly over the coming decades as a result of industrial production, mining and untreated urban runoff and waste water, as well as intensive use of agricultural fertilizers, all of which generate a wide range of chemical pollutants and pathogenic contaminants. As a result, it is estimated that by 2050, one-third of the world's population will face risks from excessive nitrogen and phosphorus in their water and one-fifth will face high water-quality risks from excessive biochemical oxygen demand (Veolia & International Food Policy Research Institute, 2015, p.3). At present, more than 40% of the global population is currently affected by water scarcity (United Nations, 2006, p.1) and by 2050, at least one in four people is likely to live in a country affected by chronic or recurring shortages of fresh water (United Nations, 2017).

In Ireland, while there is an abundant supply of surface water and ground water resources (EPA, 2016a, p.67), there is a mismatch between the areas of highest availability of water for abstraction and areas of highest concentration of water users (Kelly Quinn et al., 2014, p.2). The management of water supplies is complex and costly due to these variations and because of the highly-dispersed nature of the distribution network (EPA, 2016b, p.2). Similarly, while the quality of Irish groundwater and surface waters is among the best in Europe (EPA, 2016a, p.69), there has been a significant increase in pesticide contamination of drinking water supplies in recent years and chemicals such as lead and trihalomethane continue to pose contamination problems (EPA, 2016a, p.27), with the most widespread water quality problem being that of phosphorus and nitrogen discharges from household wastewater and agricultural activities (EPA, 2016a, p.70). As a result, the country is a long way from achieving the 'good status' required under the EU Water Framework Directive (Expert Commission on Domestic Public Water Services, 2016, p.8). Thus, while many accept there is a right to water, it is not universally agreed that there is a right to "free" treated water and this is reflected by charging schemes worldwide.

Water as an economic good

The economic resources needed for the provision and maintenance of water services mean that water services can be viewed as an "economic good" with a consequent economic value. Where water services are provided via infrastructure such as reservoirs, water treatment facilities and water pipelines, they acquire what are known as "private good" characteristics, where consumption by one person reduces availability for others and access to the resource can be restricted unless payment is made. In the run-up to the Rio Earth Summit in 1992, the International Conference on Water and Environment held in Dublin adopted four principles for sustainable water management, the fourth of which states that "Water has an economic value and should be recognized as an economic good, taking into account affordability and equity criteria" (ICWE, 1992, p.3). Other organisations such as the OECD (1987) have also highlighted the economic character of water services. However, it is still important to bear in mind that there are many benefits of water resources and services that can never be adequately measured in economic terms (Moss et al., 2003, p.27).

Some would argue that prioritising water as an economic good has been responsible for a shift towards managing water as a tradeable commodity and the subsequent promotion of water privatisation (Mangold et al., 2014, p.974). Concern has been expressed that the resulting focus on recovering the costs of service provision, for example, results in negative impacts for poorer communities (Sultana & Loftus, 2012, p.2). Evidence cited for this includes the notorious "Water Wars" in the Bolivian city of Cochabamba in the late 1990s. The Aguas del Tunari private company was contracted to provide water services and immediately raised prices to cover the infrastructure and management costs of updating local water and sewerage services. As a result, some households were forced to spend 20% of their income on water. Following widespread street protests and violence, along with almost €20 million of property damage, the government was forced to resume control of the public water supply system (Salzman, 2006, p.1-2).

In the Irish context, some of those opposing domestic water charges were concerned that the establishment of Irish Water as a public utility could eventually lead to the privatisation of water services, as indicated by statements such as: "Privatisation leads to profiteering, and it is our strongly held view that domestic water charges opens (sic) the door to privatisation and does so deliberately" (Right2Water, 2016, p.5). Similarly, the most commonly expressed view among those making submissions to the Expert Commission during its review of the charges in 2016 was not opposition to water charges per se, but rather concern that water charges, and metering of domestic households, could eventually lead to the privatisation of Irish Water and thus water services (Expert Commission on Domestic Public Water Services, 2016, p. 18; O'Neill et al, 2018) And there

were demands that the public ownership of Irish Water be confirmed by an amendment to the Constitution. A bill to provide for this passed its second stage in Dáil Éireann in November 2016 and was subsequently referred to the Committee on Housing, Planning, Community and Local Government (Houses of the Oireachtas, 2017, p.6).

Water as a social good

The acknowledgment in the Dublin principles of affordability and equity concerns also widens the definition of water and sanitation services to include social or “merit good” characteristics. Ensuring widespread access to clean and affordable water, for example, minimises the risk of poorer families who are unable to afford water bills reducing their water consumption to a level where it affects their own health and well-being and also wider public health. Others also regard access to water services as important for basic human dignity and thus socially desirable (OECD, 2010a, p.20). In this way, water services can be seen to bring benefits for society as a whole.

In the European context, some are concerned that there “is no formal legislation to protect economic accessibility” in the Directive (van Rijswijk & Keessen, 2012, p.135) and that implementation of the Directive may lead to affordability issues for low-income groups and rural communities (Reynaud, 2016, p.66-67). According to the European Association of Public Water Operators, there is some evidence that the cost recovery requirement of Article 9 has been one factor in recent water price increases in the EU, along with the need for increased investment to meet more stringent environmental standards (for waste water in particular) and the struggle by water operators to cover fixed costs in the face of declining consumption in some Member States. The Association also contends that when the impact on household disposable incomes of the Europe-wide economic stagnation is also factored in, it is not surprising that there have been increased concerns about affordability of water services in Europe (Aqua Publica Europea, 2016, p.4). It can, however, be argued that the Water Framework Directive does attempt to address this complexity of factors, with its inclusion of flexibility for lower recovery rates by Member States (subject to justification) and also its promotion of water consumption reduction incentives. As the OECD points out, this is also something that has been reflected in the experience of Member States, where very few have attempted to impose full recovery of economic and environmental costs from water service users, Denmark being a notable exception. There, industrial and domestic users pay directly for water supply and wastewater services, resulting in high prices for both. In contrast, many Member States have some type of measures in place to address social issues such as affordability issues and ensuring access to a minimum amount of drinking water at very low prices or free of charge (OECD, 2010a, p.22, p.45 & p.77).

In Ireland, concerns about the charges’ potential impact on poorer households were at the forefront of the anti-water charges campaign: “Domestic water charges are extremely regressive in nature...Those at home most, usually the most vulnerable, will generally use the most water. Unemployed, under employed, pensioners and those with disabilities will, in that scenario, be hardest hit with increasing bills calculated to reach a determined amount of income over that requires to be raised over and above allowances” (Right2Water, 2016, p.9); “Ireland is currently the only country in Europe with zero water poverty. Our government want to change that and introduce this new form of poverty to the Irish people” (Mandate Trade Union, 2016). Prior to the introduction of the charges, the government established an Interdepartmental Group to consider the affordability of the proposed new charges. The group published a report in December 2013 which indicated that single occupancy households, large families and those with medical needs were likely to be affected from a poverty perspective. However, it also noted that any scheme to subsidise such groups would be both technically and administratively difficult (Interdepartmental Working Group on Affordability Measures, 2013, p.2). In the eventual system of charges, the main affordability measure was the provision of a free water allowance for individuals of 21,000 litres per annum, along with a capping of charges at €160 for single-occupancy households and €260 for households with two or more adults and a €100 water conservation grant to assist households with water conservation measures (Expert Commission, 2016, p.15).

Integrating public, economic and social perspectives

Despite the concerns raised about the potential negative impacts of charging for water services, some argue that treating water services as an economic good can be about more than just determining how best to meet the costs of provision. Savenije and van der Zaag (2009, p.99), for example, see it as an opportunity to make

integrated choices “about the most advantageous and sustainable uses of water in a broad societal context. This is increasingly important in the context of rising demand and increased pressures on what is a finite resource. As Rogers et al. (2002, p.5) put it, “In the past most cities and utilities in the world have provided water to their customers almost free of charge because water is considered a basic necessity, and because water was a relatively cheap and abundant resource. But now with much larger communities requiring service...perhaps the best way to utilize water to the best and most-valued uses is to put a price on water, and construct appropriate tariff structures to meet different social, political and economic goals in different situations.”

This is not a new idea. In Ancient Rome, for example, water services were regarded as both a public and private good with resulting benefits for both sets of users. One set of piped water served the city’s *lacus*, or public basins and fountains, where people could obtain water for domestic uses for free. A second set of pipes provided water directly to private houses or baths and was paid for by the owners in the form of a special water tax or *vectigal*. A priority system ensured that public needs were served first, then private uses, then baths and revenue from the *vectigal* provided the funds needed to maintain the whole water system. In this way, treating water as an economic or “priced” good enabled the public or “social” benefits to be provided (Salzman, 2006, p.12-15).

As the OECD (2003, p.19) states, “... it is generally acknowledged that the right to water does not mean unlimited consumption, especially when ecological or economic constraints prevail”. The United Nations Committee on Economic, Social and Cultural Rights (CESCR), also, in its work to define the scope and content of a human right to water implicitly acknowledges some form of payment for water consumption in its declaration that “water, and water facilities and services, must be affordable for all” (CESR, 2002, para 12(c)(ii)). A similar position has been taken in countries such as the Netherlands, where the Court of Appeal in the district of Den Bosch ruled in 2010 that “the recognition of a human right to water does not mean that a claim can be made for the provision of water at no cost” (van Rijswijk & Keessen, 2012, p.130).

Additionally, it is argued that the “failure to recognise the economic and other values of water services is one of the factors that set in motion a vicious cycle of under-funding in water-related infrastructure and management activities” (OECD, 2010a, p.19). The negative consequences that can result from such under-funding are illustrated in the “free water dilemma”, as described by Savenije and van der Zaag (2009, p.99): “If water is for free, then the water provider does not receive sufficient payment for its services. Consequently, the provider is not able to maintain the system adequately, and, hence, the quality of services will deteriorate. Eventually the system collapses, people have to drink unsafe water or pay excessive amounts of money to water vendors...”. Such a situation affects poor and vulnerable communities the most. Thus, water may be a human right but not in unlimited amounts and not necessarily for free. Nevertheless, the argument of the Right2Water campaign in Ireland interpreted and communicated the phraseology of “water as a human right” to mean unlimited treated water, delivered to your home, for free.

4.2 Factor 2: The role of trust in Irish attitudes to paying for water

In addition to one’s views on whether water should be regarded as a public or economic good, aspects of our experiences and daily lives-can also influence how we respond to any new situation or issue, often in ways of which are not directly aware, and this can affect the success of otherwise of new policies such as water charging.

“Mental models” are one way to explain how we think about things in the world around us. They contain assumptions that are often based on our own previous experience or the experiences of our peers. These can influence what we perceive, pay attention to, and recall from memory (World Bank, 2015, p.69). One key influence on our mental models is our level of trust, which is usually understood as holding a positive perception about the actions of an individual or an organisation (OECD, 2017, p.16). If we perceive those in authority as untrustworthy, for instance, this perception will reinforce our mental model that we must be on guard against their potential betrayal. Internationally, public trust in national governments and political institutions has been declining in recent decades (Quandt, 2015). There is also evidence that individuals hold more negative views towards government and the economy when exposed to economic insecurity (Reeskens

and Vandecasteele, 2016, p.24). This has certainly been the experience both in Europe and Ireland in recent years, as a result of the 2008 global financial crisis and ensuing recession.

Among EU member states, public trust in national political institutions fell by 18% between 2007 and 2013 (Hobolt, 2014, p.56), particularly in countries that were confronted with austerity measures imposed by external actors (Pennings, 2017, p.99). This was especially evident in Ireland: between 2006 and 2014, levels of distrust in the Irish parliament increased from 39% to 54% (Brereton & Fox-Rogers, 2016, p.7), peaking in Autumn 2010, when Irish citizens had the highest levels of distrust in both their parliament and government of all EU-15 countries (Roth et al., 2011, p.10). While there has been some increase in their satisfaction with government since then, citizens' trust in parliament and government parties has not yet been regained (O'Sullivan et al., 2014, p.565). Internationally, there is also evidence of a difference in levels of trust according to income, with those on higher-income having an average of 10% more trust in government than those on lower incomes (OECD, 2017, p.11). There are signs of such trust 'issues' in the mental models of anti-water charges protesters, seen in statements such as "I have lost all faith in the government, I was swayed in my last vote by promises that were not met..." "Unfair, unjust and promises broken. I will not trust the main parties again..." and "Our political system is broken, our politicians and political parties are owned by corporate elites who act in their favour...." (Herne, 2015, p.3).

A linked issue is that of fairness (or justice), in that decisions or policies on natural resources such as water are more likely to be accepted by the public if the process is regarded as being fair (Syme et al., 1999, p.53). In contrast, if people feel they have been treated unfairly, they may refuse to comply with a policy and even accept the resulting negative consequences such as financial penalties (OECD, 2017, p.12). This may have been a factor in the refusal of a certain number of protesters to pay their Irish Water bills (Irish Water, 2016). Fairness, or justice, was a recurring theme in the anti-water charges campaign, as evidenced by statements such as: "...the low income, working class people have really felt the brunt of this government, and the wealthy and rich have once again emerged unscathed. Unfair, unjust and promises broken..."; "the water movement...has awoken the Irish people to the unjust way this country is governed" (Herne, 2015, p.3). This is interesting as it has been shown that income inequality was remarkably stable during the recession (Callan et al, 2017) with much effort made by successive governments to protect those on lower incomes. It must also be borne in mind that levels of distrust and dissatisfaction with government are likely to be higher amongst those who vote for parties that do not get into government (O'Sullivan et al., 2014, p.552). Prior to the general election in February 2016, for example, over 80% of anti-water charges protesters surveyed said they would vote for parties such as the Anti-Austerity Alliance, People Before Profit (now "Solidarity") and Sinn Féin, as well as 'left' independent candidates (Herne, 2015, p.2), all of whom at that time, having had members elected to parliament, ruled out serving in a coalition government.

There is also a view that a lack of trust in government is characteristic of "clientelist" political systems, where public representatives seek to use their influence to obtain access to state resources for their constituents ("clients") in return for electoral support (O'Sullivan et al., 2014, p.550). The Irish political system has long been regarded as one where, as Basil Chubb famously observed, it was believed necessary to have "a man in the know" on your side in order to obtain State services (Chubb, 1963). This "man in the know" was epitomised, as Komito (1992) shrewdly pointed out, in the character of Tull MacAdoo, a rural T.D. in John B. Keane's *Letters of a Successful T.D.*: MacAdoo boasts that "[The] new road opened as promised ... and they think I'm a small god now in Kilnavarna. There's eight hundred and fifty-seven votes there and I could safely say that I'll get five hundred in the October elections". The persistence of the expectation on the part of Irish voters for some 'return' on their electoral investment can be seen in findings that the most important political consideration for 41% of voters in the 2016 general election was "choosing a candidate to look after the needs of the constituency" (McShane & Fanning, 2016, p.155); this consideration had even higher levels of support among voters choosing candidates from some of the main Right2Water parties, such as Independents4Change (76%) and Anti-Austerity-Alliance/People-Before-Profit (42%) (McShane & Fanning, 2016, p.158). It can also be seen in quotes from members of the campaign such as "...other countries that pay water charges get benefits in other ways (childcare, healthcare), we get nothing for our taxes" (Herne, 2015, p.9).

Mental models can lead to what is called '*confirmation bias*', where people have a tendency to search for, and use, information that supports our mental model or beliefs and ignore, suppress or forget evidence or

observations that do not match (World Bank, 2015, p.69). This can be the case when considering whether to pay for water services. Bicket & Vanner (2016, p.2) argue that “People are more likely to accept policy if they trust the governing institution...while a lack of trust has been observed to be accompanied by lower levels of willingness-to-pay”. In the Irish context, research by Walsh (2012, p.454-455) on tax compliance, for example, indicates that if there is a lack of trust in government to spend tax revenues wisely and this will have negative effects on compliance levels.

There is also a view that “...significant segments of the population believe that water shortages are due to lax planning and management by government and water providers” and, as a result, they may be unreceptive to initiatives for managing or improving water services (Jorgensen et al., 2009, p.234). This can be seen in comments from protesters such as “the state has done nothing to improve or repair the service in all those years. I pay tax, USC and won't the pay water charge” (Herne, 2015, p.9) and also in demands from the anti-water charges campaign that, instead of metering public consumption, the government should have focused on addressing the high levels of leakage in the water distribution network resulting from decades of under-investment (McGee, 2012; Joint Committee on Future Funding of Domestic Water Services, 2017c). In addition, there was a lack of confidence among the public in Irish Water itself, the new semi-state company which had taken over responsibility for water services from local authorities. This was fuelled in part by reports of its spending on consultants, public relations and staff salaries and bonuses (Expert Commission on Domestic Public Water Services, 2016, p.19). Linked to this were concerns about the awarding of a large contract to install water meters to GMC/Sierra in 2013. This was a subsidiary of the Siteserv company which had been sold in 2012 by the Irish Bank Resolution Corporation in a controversial deal involving a 70% write-down of the company's debt (Irish Times, 2015). However, Irish Water also suffered from being undermined by government policy as the government altered the charging regime and appeared to indicate that non-payers of the charges would not be prosecuted or have their supply cut off (O'Connell, 2014).

It is interesting to compare the lack of trust on the part of Irish anti-water charges protesters with that of group water scheme members. Group schemes are predominantly rural, run by local communities and voluntary committees which, it is argued, gives them a moral persuasion that central government can never have and a resulting strong “buy-in” from their members (McGee, 2012). Such a local and personal connection to the source of their water services provider is not something experienced by most urban residents and so could be regarded as an additional factor in their lack of trust. However, the point must be made that, up to 1997, the majority of households on local authority-run water schemes around the country was willing to pay for water services and all public system users - rural and urban - had paid water rates for decades up to their abolition in 1977.

4.3 Factor 3: Influence of personal values on paying for water services

Another significant influence on our ‘mental models’ are our personal values, particularly those influenced by family and culture. Values tend to remain constant over long periods of time and can apply to a range of situations, unlike attitudes, which are more situational and illustrate our favourable or unfavourable response to a particular person, institution or event (Reeskens & Vandecasteele, 2016, p.1-2). Research on tax compliance, for example, has shown that people's level of compliance is strongly linked to both their personal beliefs and those of society at large. In general, they “seek to comply because they believe it is the right thing to do, not because of fear of punishment if they do not comply” (Walsh, 2012, p.454). In relation to water services, there is a view that most of today's water problems actually have more to do with values rather than being related to technology (Hoekstra, 1998, p.621), for example, Moss et al. (2003, p.17 & 27) argue that “Much of the tension around the value of water is due to...the fact that people hold very dearly to the non-market values that they fear will get lost if water systems are managed through market approaches”; these include “the fear of loss of local or social control of water resources. As noted above, there was a strong concern expressed that the water charges in Ireland would pave the way for the ultimate privatisation of water services and that public control of these services would be lost. There were also fears that people's right to water would be threatened by the introduction of direct charges.

Even if people value water as a human right, the actual value they put on water services themselves can be influenced by the level of service they are accustomed to receiving. According to Moss et al. (2003, p.7 & 21),

those who already enjoy the benefits of something tend to have forgotten what it would be like to live without it; the resulting complacency, they argue, leads to a situation where those who have adequate access to water appear to give it low value - as the old saying goes “You don’t miss the water until the well runs dry”. This may well be the situation in Dublin, for example, where it has been 40 years since households have had to pay directly for water services. As a result, they may have taken it for granted that water is not something to be paid for directly and, so, any attempt to introduce direct charges would naturally be met with strong opposition. This is borne out by the campaign appearing to be strongest in Dublin, which was the origin of the previous anti-water charge campaigns in the 1980s and 1990s, with just under half of people protesting against the water charges in December 2014 being from the Dublin region (Herne, 2015, p.2). It is also notable that a large number of elected representatives involved in the Right2Water campaign represent constituencies in the Greater Dublin area, for example, all three members of parliament (TDs) from the Solidarity party (formerly Anti-Austerity Alliance) and ten of their eleven local authority councillors are Dublin-based, as are all three TDs from the People Before Profit Alliance and eight of its fourteen councillors; Sinn Féin also has its largest groupings of TDs and councillors in Dublin constituencies (Office of the Houses of the Oireachtas, 2017; Citizens Information, 2017a).

This sense of complacency towards water services is reinforced by the reactions of some of those who had been paying directly for water before the charges were introduced for public water service users. John Comer, president of the Irish Creamery Milk Suppliers Association (one of the country’s main farming organisations), is quoted as saying that “It is frankly amusing to see people living in suburbs and cities roaring that water is a human right and must, therefore, be free. Nobody said it was a human right and must be free when we were paying for our supply for 40 or 50 years. As soon as the bill popped through a letter box in Dublin or Cork, paying for water became a national issue...When it was just people living ‘in the sticks’ nobody gave a damn”. He went on to say that “We’ve never been under the illusion that you turn a tap and — magically — water comes out because we had to arrange our own water supply. That’s why most farmers’ attitude to the water charges question is amused irritation” (Baker, 2015).

The divergence between the “mental models” of the anti-water charges campaign and those of other water users can also be seen in the campaign’s claim that the charges were a form of “double taxation”, on the basis that the public already paid income and other indirect taxes. This is despite the fact that tax relief on the charges was introduced in 2015 for those paying income tax (Revenue Commissioners, 2015a). When faced with the fact that group water scheme members had been paying such ‘double’ taxes for years, the campaign’s response was to call for the abolishment of charges for these too and for all water services to be funded from general taxation (Joint Committee on Future Funding of Domestic Water Services, 2017a). In response to this proposal, the National Federation of Group Water Schemes expressed the opposite view that “universal metering as a management tool and as a water conservation tool on their group water schemes, combined with a reasonable charge on usage over and above a free allowance, has been the single driving force behind the overall transformation of the sector” and that there was unlikely to be any diversion from their charging scheme (Joint Committee on Future Funding of Domestic Water Services, 2017a).

There may also be a more widespread sense of complacency about water services, given that when Irish Water were contacting households about leakage on their premises, it took three or four attempts to get people to engage with the issue (Joint Committee on Future Funding of Domestic Water Services, 2017b). In general, where there is a low value on water services, this can lead to a reluctance on the part of government to increase rates or taxes for such services, as they are not valued by their constituents i.e. there is no political ‘gain’ from doing so (Moss et al., 2003, p.13). This has certainly been the case in Ireland, where water services have had much less priority for investment for several decades now than health and education issues, for example, with the result that by 2015 the public water system was facing serious difficulties, as mentioned earlier. Ironically, the fact that up to 49% of all drinking water was being lost before it reached household taps as a result of such underinvestment was used by the anti-water charges campaign as a justification for households not having to pay (McGee, 2012), despite the fact that the underlying lack of value amongst public water service users themselves was itself likely to have contributed to the development of this situation.

4.4. Factor 4: How the water charges were “framed”

“Framing” is the term used to describe both how choices are described and, also, the interpretation that we make of such choices (World Bank, 2015, p.27), both of which then influence what action we may take in response (Hanke et al., 2002, p.7) and thereby influence the acceptability or otherwise of a policy. In environmental disputes, frames are generally centred around what the key issue is and how it should be settled, for example, a water shortage could be framed by one person as a problem of “insufficient water supply” but by another as one of “excessive water consumption” (Brugnach et al., 2008, p.2) and each frame will result in different solutions being proposed. The language used, the context in which choices are presented, and the intentions or goals of the person or institution involved, are all part of the ‘frame’ for the particular issue being presented, with resulting implications for how it will be received and the degree of success it will achieve

Government framing of the water charges

When developing new policies, the benign approach of governments is to determine what is best for the population, as a whole, and then implement policies that meet that broad perspective; in the process, they tend to adopt frames that are based on power and “expert” advice (Hanke et al., 2002, p.20). Where a particular policy may involve some degree of risk (often the case with environmental issues), government has been shown to be more concerned with economic and scientific considerations and to largely ignore the psychological and social considerations that typically characterise the lay public’s views (Hanke et al., 2002, p.15). As we shall discuss, this appears to have been the case in Ireland in recent years, from the first reference to the reintroduction of domestic water services charges, in the 2009 Renewed Programme for Government (Government of Ireland, 2009, p.5), to the suspension of the charges in 2016.

This period saw the repeated use of key terms and phrases on the part of the government which served to produce a predominantly economic framing of the charges on the part of government. The first of these was “cost”. As Jollands and Quinn (2015, p.177-182) see it, this term was used by successive governments in efforts to promote and establish a solution to the various issues of water supply and was associated by them with the provision of reliable infrastructure, processes and skilled employees to support the ongoing needs of water provision. It often appeared in the same context as references to “revenue streams” and the “financing” of public services, as can be seen in various statements from this time and in the National Recovery Plan 2011-2014:

“...the introduction of a scheme for the metering and charging for domestic water...will lead to significant capital and current savings to the Exchequer and the General Government Sector over the medium term. This reflects the overall consolidation strategy...which emphasises the importance of reasonable charging mechanisms to mitigate the costs of public service delivery and reduce waste. Charging for water will introduce a new revenue stream to meet costs at present funded by taxation” (Government of Ireland, 2010b, p.77).

While the latter phrase went some way to avoiding accusations that the charges would represent double taxation, this policy was part of a large package of harsh taxation increases that, cumulatively, amounted to approximately 8% of GDP at a time of rising unemployment and public pay cuts. This was compounded by the Plan’s broader expectation of a “...reasonable co-payment on the part of the citizen” for public services in order to offset some Exchequer costs but also to “... lessen the waste arising from unnecessary oversupply, which is always a risk when goods or services are provided free” (Government of Ireland, 2010a, p.59). The phrase “for free” was misleading, as all public services, including water services, were paid for through taxation. It may also have served to reinforce the existing inaccurate perception among certain members of the public that water was (and should remain) free. The reference to “unnecessary oversupply” could also be interpreted as an unsubstantiated criticism of public water consumption, especially as no data were provided to back it up. It is notable that this lack of data persisted right through to the ultimate failure of the policy due to a lack of any Regulatory Impact Assessment. Similarly, the terms of the substantial financial support package provided by the EC-ECB-IMF “Troika” contained a commitment to “...move towards full cost-recovery in the provision of water services...with a view to start charging in 2012/2013” (Government of Ireland, 2010b, p.8) without any reference to the potential social implications of such charging and how they might be ameliorated.

Given the pressures facing the country at the time, it is not surprising that such a “economic” frame appeared to dominate on the part of the government, even though there were signs of other dimensions being considered: for example, the 2009 Renewed Programme for Government did state the intention to “...introduce charging for treated water use that is fair, significantly reduces waste and is easily applied” (Government of Ireland, 2009, p.5). The references to fairness and reducing waste do give the proposed charges somewhat of a “social” and “environmental” gains frame, rather than just a solely economic one. This language is also subsequently echoed in the intention of the government in 2011 to introduce a “fair funding model to deliver clean and reliable water (Government of Ireland, 2011, p.16), again providing some evidence of a potential gain for domestic users in the form of improved water services.

Overall, though, it is clear that the predominant frame that emerged from government was one of an economic and financial rationale, which largely excluded social or environmental dimensions. In this regard, it is instructive to note the contrast between the framing of the water charges and that of the new carbon tax which both appeared for the first time in the 2009 Renewed Programme for Government. Firstly, the carbon tax was contained in a section headed “Taxation for Sustainable Development”, where the phrase “sustainable development” immediately gives a different “frame” to that of “Local Taxation and Charges”, the section in which the water charges appeared. More significantly, there was also an explicit reference to the social implications of this tax, a key principle of which was to be that “...those most at risk of fuel poverty will be protected” and “the relative tax burden on labour will be reduced” (Government of Ireland, 2009, p.4). Such a framing of the tax has the advantage of explicitly addressing concerns about the carbon tax’s potential impact on lower-income groups and also double taxation, unlike that of the water charges, which does not provide any such reassuring frame.

Additionally, the carbon tax was, from the outset, to be collected by the Revenue Commissioners, the government agency responsible for all taxation matters. Research indicates that the majority of Irish people considers tax evasion to be unacceptable and that it is everyone’s civic duty to pay their taxes (Revenue Commissioners, 2013, p.43-44). In contrast, the water charges were not a “tax”, as such, and were to be paid directly to Irish Water. Hence, there is the possibility that the charges were not framed in the public mind in the same way as a tax would be. The experience of property taxation in Ireland tells us that compliance was likely far lower than if collected as a tax by the Revenue Commissioners. The €100 household charge which had been introduced in 2012 and was payable to local authorities saw widely varying compliance rates across the country, ranging from as low as 54% (Deegan, 2012). In contrast, when the household charge was replaced by the Local Property Tax in 2013, and responsibility for collection given to the Revenue Commissioners, a compliance rate of 95% was recorded nationwide during the first year of operation (Revenue Commissioners, 2015b, p.2).

Anti-water charges campaign frames

The government’s framing of the charges was quickly seized upon by members of the anti-water charges campaign, whose own frames were dominated by the very social concerns that the government’s frame lacked. This was aided by timing, whereby water charges were implemented close to the end of the so-called “austerity programme” (see below). In general, the frames held by members of a stakeholder group aim to condense and simplify the world in ways that are intended to mobilise support for the group’s particular cause, and also to undermine the effectiveness of opponents (Hanke et al., 2002, p.7). Right2Water, the main group opposing the water charges, was not an environmental group but more what is termed an “activist” group, which tends to be made up of lay citizens who oppose government decisions but are not themselves environmentalists (Hanke et al., 2002, p.13); left-wing political parties and trade unionists also played a central role in the group. This may explain the group’s focus, not on the environmental aspects of the wider water charges debate, but rather on the social aspects and framing clean water supply as a human right.

There is the view that members of activist-type groups tend to focus on only a small part of information provided by policy makers and frame such information from a more personal vantage point. The fact that the anti-water charges campaign did not produce any substantial evidence-based research themselves to support their claims but relied instead on more general and emotionally-based arguments is an example of this. Activist groups also tend to view the issue they are disputing as “...a symptom of global systemic problems, hegemony,

greed, multinationals, and unscrupulous politicians”, a perspective that leads them to view “view the actions of those above them with both suspicion and disbelief” (Hanke et al. 2002, p.18).

Some researchers also suggest that activist groups are more inclined than most other stakeholder groups to frame the use of hostile tactics and civil disobedience as being necessary to achieve their aims (Hanke et al., 2002, p.9). This was evident in the anti-water charges campaign, where, in addition to public protest marches, there was also the use of direct-action and civil disobedience tactics, such as the disrupting the installation of water meters at various locations. The use of such tactics can be seen as an attempt to gain recognition by groups that feel they have low power and whose concerns have not been sufficiently recognised: (Herne, 2015, p.3).

Framing the water charges as a “loss” or a “gain”

It is arguable that the public’s response to the water charges was influenced by whether they framed the charges as representing either a “loss” or a “gain”. This notion draws on the “Prospect Theory” of Nobel laureates Kahneman & Tversky (1979), where people value a loss more highly than an equivalent gain. As Alfonso (2013, p1) puts it “losses hurt more than gains feel good”. In addition, people tend to measure any potential loss or gain against our current position - known as the “endowment effect” (Convery, 2013, p.2); as Victor (2013, p.5) puts it, “...people are highly averse to choices that might lead to losses”. It is not surprising, therefore, that people in Ireland who had not been paying directly for water services for decades would regard the new charges as a significant “loss”, even with the potential “gain” to be had as a result of metered consumption encouraging water conservation and lower bills, along with the “gain” of a more secure source of finance for improvements in water services.

This contrasts with the experience of Irish group water scheme members who have been paying water service charges for decades. In the early days of the group schemes, there was a similar negative response to having to pay an annual charge for access to such services. In 1946, 90% of rural households still depended on water from wells, streams or pumps or were collecting rainwater while 90% of town households had piped water (Daly, 1997, p.216). The government initiated a rural water services programme, providing grant aid for connections but progress was very slow, with only 12% of rural homes having indoor water on tap by 1961 (Daly, 2016, p.136). This was in stark contrast to the success of the rural electrification programme, which took only nine years to connect over 50% of rural households from its inception in 1947 (Cullen Owens, 2005, p.299). As Sheil (2007, p333) remarks, this resulted in a situation where someone would be hurrying home with buckets of well water so as to be in time for some favourite television show – “his house may have a vacuum cleaner, but not a tap”. The most vocal opposition came from the National Farmers’ Association, who objected that the government’s scheme would result in farmers being forced to pay higher rates on agricultural land and on farm buildings (Daly, 1997, p.216) and they received some support from the then Minister for Agriculture, Patrick Smith (Daly, 2016, p.136). In this regard, the scheme charges were perceived by farmers (mostly men at that time) as a loss of income, despite the fact that piped water would bring benefits (or “gains”) in the form of improved hygiene in milk production. However, the reality was that the burden of fetching the water needed for cooking, washing and cleaning tended to be the responsibility of the women in a household. From their perspective, paying for water services would represent a significant gain and this is evident in the response of the Irish Countrywomen’s Association (ICA) to the slow uptake of the scheme. It set up a Campaign for Rural Water, organising information meetings around the country in an effort to increase the number of households joining the scheme. The contrast in perspectives between men and women on the issue was summarised in a comment at one such meeting: “Many men in rural Ireland are not yet fully aware of the advantages of piped water supply. Very often they will get a water supply with the advantage of stock in mind rather than the housewife, and... if the stock don’t want water, the housewife has to do without it also’ (Shiel, 2007, p,333).

Such attitudes persisted well into the 1970s and 1980s: for example, Seán Clerkin, the national policy adviser for the National Federation of Group Water Schemes, remembers his reaction thirty years ago when a group water scheme was being set up in his local area: “I knew it would be a costly thing to do that and that the connection fee would be high,” he says. “But then they started talking about an annual charge for water. I was astonished. I just couldn’t get my head around that, couldn’t understand it at all. How could you charge for something that was free?” (McGee, 2012).

However, the subsequent experience of the benefits which the group schemes have brought to its members, particularly in improving supply, updating infrastructure and improving water quality appears to have turned initial perceptions of the charges as a “loss” to one of gain. There is also the fact that many on group schemes went from a situation of having to bring water into their house daily from a local well or public pump and only having outside toilet facilities to one where they had piped water and flushing toilets in their homes. In this regard, having to pay a charge for these services is likely to have represented more of a “gain” than a “loss”. The acceptance of group scheme charges may also be partly due to they have been in place for so long now that they have become a normal fact of life, as is the case in almost every OECD member country (TASC, 2013, p.7).

The analysis here does not mean to imply that all the protesters had a similar framing of the water charges issue, no more than they all came from similar economic or educational backgrounds. However, it does appear that the attitudes of the anti-water charges campaign were influenced, to a degree, by a combination of their own framing of the issue as well as their interpretation of the Government’s framing of the charges.

4.5 Factor 5: Timing of the water charges introduction

The final factor we examine is whether the actual point in time when the charges were first introduced influenced the subsequent public reaction to them. Central to this timing issue are the socio-economic conditions operating in Ireland at the time, particularly from 2011 when the charges were first announced as part of the “Troika” financial support package to Ireland. The country had been severely exposed to the fallout from the global economic crisis which began in 2008. The subsequent drop in government tax revenues resulting from the property market collapse, coupled with the burden of the bank guarantee scheme, pushed government borrowing to unsustainably high levels and resulted in the highest budget deficit in Europe in 2009 (Jollands & Quinn, 2015, p.174). The correction involved a series of harsh budgets, with significant cuts to public services and welfare payments, as well as the introduction of new charges such as the universal social charge and the local property tax. Many households were caught in a negative-equity trap with property they had purchased at inflated prices during the boom years. The situation began to improve from 2014, after 2013 peaks in government debt, deprivation rates and mortgage arrears (CSO, 2015; Central Bank of Ireland, 2016, p.23). The unemployment rate more than halved from its 2012 peak to reach 6.2% by March 2017 (CSO, 2017). Ireland has continued its recovery apace since then.

In common with several other countries, a coalition of activist groups developed in an alliance against “austerity” presenting the view that that the cuts necessary to meet strict fiscal targets were being “socially destructive and counter-productive”, resulting in rises in poverty, social exclusion and both public and private debt levels (Leahy et al., 2015, p.9). There was a significant decline in average household disposable income, from €939.80 per week in 2008 to a low of €776.26 in 2012, with slow subsequent increases to €810.40 in 2014 (CSO, 2016). The loss was greater for households in the bottom 10%, with an annual fall of 7% between 2008 and 2010, compared with a fall of 3% for those in the top 10% of households (OECD, 2013, p.4). Ireland also had the highest rate (25%) of workers on low pay (i.e. earning less than two-thirds of median income) of all OECD countries in 2014 (OECD, 2016, p.238): this represented an income of approximately €12,291 or less, based on a 2014 median income of €19,772 (CSO, 2015).

A survey conducted in December 2014 of over 2,500 people who took part in public protests against water charges showed that many said that they were unable to afford the charges due to a combination of factors such as existing household bills, rent increases, reliance on welfare, mortgage arrears and other debt issues and some said they were going without basic necessities such as food: “I have nothing left to pay without cutting into the little food money I have”; “I am single mother with two children. I am poor, I cannot afford another bill and can't pay the ones I have already”; “I am ill, my home is being repossessed by the bank and this is just one more charge too far” (Herne, 2015, p.9). The introduction of domestic water charges in 2014 may have represented a tipping point for certain sectors of the public (Brereton & Fox-Rogers, 2016, p.4). Some commentators were of the view that “...the water charge, which might have been acceptable on its own if handled with more political skill, was coming on top of a succession of new tax impositions since 2009...There was an element of ‘enough is enough’ about the street protests...” (McCarthy, 2017); as another put it, “Water charges became the lightning rod through which pent-up public fury was vented” (Molloy, 2016).

There were also signs that opposition to the charges may have been reflecting a deeper public discontent with government efforts to effectively tackle wider social problems over the longer-term. This can be seen in statements from protesters such as "...anger has been simmering with anti-austerity policies and arrogance of government for years. We just need a platform..." and "Water charge protests have been effective in crystallising a broad anti-austerity movement" (Herne, 2015, p. 14). Similar sentiments were expressed during the campaign against the introduction of domestic refuse collection charges in the early 2000s: in addition to arguments about 'double taxation' and privatisation of public services, there were also signs of deeper issues, with some protesters viewing the campaign as being "a bit about the bin tax, a bit about a lot of other things...People are really pissed off. The bin tax has just pushed them that bit further over the edge" (Sheridan, 2003).

Moreover, the first water-charge bills arrived into letter boxes shortly after a budget in which a strong perception was given by the then Fine-Gael-Labour government that the economic crisis has been solved². In the heat of the economic crisis in 2008 to 2011, there had been relatively little protest with just one day of a public-sector strike in response to pay cuts. However, the return of growth and general improvement in macroeconomic conditions in the run up to the 2013 Water Services Act may have led to a perception among some people that further measures such as the water charges were no longer necessary, and their abandonment would not result in economic disaster. It could be argued that the Government acted too late, thereby rejecting the perceived wisdom of 'never waste a good crisis'. A similar point is made by Kingdon (2011), who refers to the opportunity provided for effective policymaking by "policy windows", where the separate streams of problems, solutions and politics can "come together at critical times. A problem is recognized, a solution is available, the political climate makes the time right for change, and the constraints do not prohibit actions" (p.88).

5. Discussion

From the analysis above, it would appear that public opposition to the introduction of domestic water charges in Ireland was not generated, or driven, by one single issue; rather, it seems likely that several factors were in play, including wider social and economic circumstances, historical issues and the personal experience of different citizen groups.

A key claim made by the anti-water charges campaign was that water is a human right and that funding water services through general taxation is the only way to protect access to these services for all. While it is logical to consider water as a substance to be free (Moss et al., 2003, p.59), the treatment and transportation is not free. Wastewater services incur real and significant costs, which a general taxation model may not be able to deliver over the longer term. This has certainly been the case in Ireland, where investment in water services has long had to take a back-seat to more politically urgent areas such as health and education.

There is also an increasing need for managing water demand in order to ensure sustainable supplies into the future and, in such a context, direct charges that can incorporate some consumption-related element may become more necessary. It is also relevant to bear in mind that activist-type groups are often associated with a 'benign' view of nature, where natural resources such as water are expected to be abundant; such groups tend to be less bothered by environmental problems and less inclined to take co-responsibility for both the problem and its solution by changing their behaviour (Steg & Sievers, 2000, p.251). This can be seen in the Right2Water campaign's insistence that water is a human right and that should, therefore, should not incur a direct charge, as well as statements that put the burden of conservation solely on government such as "If the government were genuinely concerned about the conservation of water, they could invest in fixing and upgrading infrastructure. The real reason for the introduction of water charges is to charge citizens for a basic human right and to turn an essential service into a profit-making commodity" (Right2Water, 2014). While there were also concerns about the charges possibly paving the way for future privatisation of water services, legislation is currently being developed to ensure continued public ownership of Irish Water. There were also linked concerns that viewing water as an economic good and charging for it would lead to adverse impacts for

² See Anon (2012).

those on low incomes. While some analysis was carried out prior to the introduction of the charges into possible affordability impacts and how best to ameliorate them, there is a need for more up-to-date research on how exactly the charges did impact on different households.

It is clear that public trust in government and public institutions, both internationally and in Ireland, was damaged by the fallout from the economic crisis. Lack of trust, along with perceptions of fairness, have implications for how accepting people are of government policies and it is likely that this partly drove opposition to the introduction of domestic water charges in Ireland. However, the particular nature of the Irish political system, especially its enduring clientelist nature and how the electoral system may be reinforcing this, may also have had a bearing on levels of public trust. The importance to governments of public trust cannot be understated, given that governments cannot function effectively without the trust of citizens and, even where a policy may be in people's best interests, low levels of trust can lead to them resisting (OECD, 2017, p.3-4). In a recent study, the OECD outlines core issues to be addressed if citizens' trust in government is to be restored; these include openness and stakeholder engagement in the design and delivery of public policy, listening to citizens and responding to their feedback, and promoting high standards of behaviour which reinforce the credibility and legitimacy of government (OECD, 2017, p.22-23).

Efforts have been made to enhance trust through the establishment of the Public Water Forum (under the Water Services Act 2014) as an independent consumer consultative forum which addresses affordability, costs, and communications / education and engagement (Public Water Forum, 2017).

The personal values of those opposed to the water charges also appear to have played a role in shaping their resistance. Their strongly held views about the value of continued public ownership of Irish Water, for example, were taken seriously enough by the Expert Commission and the parliamentary committee for the issue to be the first one addressed in both their reports, pointing towards a potential Constitutional provision being made (Expert Commission on Domestic Public Water Services, 2016, p.1; Houses of the Oireachtas, 2017, p.6).. Addressing strongly-held views and values is a complex and lengthy process: while people's positions can shift over time, some may "have tightly knit mental maps that would be highly resistant to revision..." (Hanke et al., 2002, p.38). Such a resistance can be seen in statements from some Right2Water campaign members even after the recommendation to abolish the charges was made in April 2017: "...the Minister should make no mistake about it: the Right2Water campaign has not gone away and people power can and will stop any attempt to reintroduce water charges" (Healy, 2017). It is instructive to note that almost 15 years after the introduction of domestic waste charges, there are still signs of similar entrenched attitudes that the public should not have to pay directly for such services: in the Dublin area, almost 40% of household waste collected for recycling (for which, until recently, there is no charge) is being contaminated by non-recyclable waste, the disposal of which is charged (Murtagh, 2017). Such a perspective echoes the suggestion that Irish society, in general, has been slow to accept responsibility and a sense of ownership for the state of the national environment, with concern being less about what "we"...are doing to ourselves than what "others"...are doing to us, one that is closer to that of developing countries than our European neighbours (Yearley, 1995, p.661).

A fourth relevant factor relates to the divergence between how the issue was framed by government and by those opposing the charges. The government's predominantly economic and financial-based framing was driven, no doubt by the very real demands of bringing the public finances back into line and the EU's Water Framework Directive. However, its neglect of social concerns, for example poverty proofing the measure more clearly, may have inadvertently fed public resistance to the charges. This emphasis on social concerns may, however, also point to an "activist-type" mindset driving some of the anti-water charge campaigners, along with their framing of the use of civil disobedience tactics as necessary and acceptable. Whether the public viewed the charges as a potential loss or gain may also have played a role, especially for those households who had not been paying directly for water services for decades. Jollands and Quinn (2015, p.184) argue that, as a result of the disconnect between the government and public frames regarding water charges, any focus on providing a sustainable water supply had been side-lined. This view is also echoed by the Sustainable Water Network (SWAN), an umbrella network of leading Irish environmental NGOs, who are of the view that "Because of the confusion between financing, metering and privatisation, compounded by other factors such as poor engagement, lack of transparency and the austerity context, resistance to charges has become very entrenched among a significant proportion of the population" (SWAN, 2016, p.2). Such frames of losses or

gains are not necessarily immune to change, as illustrated by the changing attitudes experienced by group water scheme members over the years, thus showing the potential for a similar shift being achievable in relation to public water service customers.

A final factor explored is that the timing of the introduction of charges may have helped to fuel opposition in two ways. Firstly, there was the cumulative impact of contractionary national budgets from 2008 onwards, including service cuts, increased charges and taxes, falling income and high private debt. In this context, the water charges, coming as they did at the end of these measures were, perhaps, the last straw for certain people. It may also have been that clear signs of becoming obvious to the public in early 2014 may have led to a perception that the charges were no longer necessary and so could be 'safely' resisted i.e. the economy was no longer in danger. It may have been the case that there was too long a gap between the announcement of the charges at the end of 2010 in the National Recovery Plan³ and the appearance of the initial legislation two years later in December 2013, giving time for opposition to grow. Even so, while introducing them earlier might have avoided this, it is not clear that it would have made them any more acceptable, given the other likely factors we are discussing here.

Despite the actual mix of factors influencing the attitudes of those opposing the charges and how valid these attitudes may have been, the fact remains that the anti-water charges campaign did manage to force the government into a humiliating policy reversal. In this regard, it is instructive to take a closer look at how representative of public water service users the campaign could claim to be. One way to do this is to see how many households were actually paying for their water services by the time charges were suspended in April 2016. Firstly, 20% of the population had already been paying directly for water services for decades, either as part of group water schemes or by funding their own wells and wastewater treatment (Irish Water, 2015, p.11). The remaining 80% were provided with water services through local authority public schemes, with many of them also paying direct charges up to 1997, with the exception of those in the Dublin area. All public system users became Irish Water customers in 2014 and were subject to the new direct charging regime. Of these, 64% had paid charges to Irish Water by March 2016 (Irish Water, 2016), representing 48.5% of all households nationally. Coupled with those paying privately or through group schemes, almost 70% (48.5% + 20%) of Irish households were paying directly for water services at the end of 2015. Had the charges continued, it is likely that this figure would have increased further, as a poll in September 2015 found that 80% of voters ultimately intended to pay the water charges (Collins, 2015), a significant increase from a figure of 48% in 2014 (Carroll, 2014). This poll appeared to have a high level of accuracy, given that it found 51% of voters had paid their water bills by September 2015, a figure very close to the Irish Water billing statistics for this period which show a payment level of 55% (Irish Water, 2016). These figures suggest that the protesters only represented around 30% of households at most.

While it is likely that the percentage who paid the water charges includes some who were still, in principle, opposed to those charges, it nevertheless appears that a significant majority of Irish households were prepared to pay directly for water services. This was also the view of the Public Water Forum, established under the Water Services Act 2014 to represent the interests of the public and water consumers: "While conscious of the strident opposition to water charges in some sections of society, the Forum notes that more than 60 % of the relevant population had paid water charges before their suspension. It is also conscious of the 500,000 members of group schemes who are charged on a volumetric basis after providing for a free, minimal allocation" (Public Water Forum, 2016, p.1). Furthermore, it is notable that even before the decision was taken to suspend the charges in May 2016, exit poll data for the general election held that February showed that fewer than one in ten voters (8%) cited water charges as the most important issue influencing their choice of first preference candidates; even amongst those voting for parties / candidates active in the anti-water charges campaign, water charges were only a key issue for 20% or fewer, e.g. Independents4Change (20%), Sinn Féin (19%), Anti-Austerity-Alliance/People-Before-Profit (18%) (McShane & Fanning, 2016, p.126). There are echoes in this of the previous anti-domestic refuse charges campaign. This campaign was largely concentrated around Dublin and claimed to represent the majority of working-class people (Sheridan, 2003) but, just one year after the height of the campaign in 2003, payment of the charges

³ Government of Ireland (2010)

nationally had increased significantly. This included Dublin, where some areas reported a 100% compliance rate, along with significant increases in the amount of domestic waste being recycled (Melia, 2004).

The apparent willingness of a large majority of the population to pay for water services tallies with evidence of an overall change in Irish attitudes towards paying for environmental services in recent years. From 2000-2013, a period that encompassed the Celtic Tiger boom and the subsequent recession, there was a clear shift in preference by the Irish population towards paying for environmental services, such as water services, via higher prices or pay-by-use systems rather than by increases in general taxation - see Table 1 below:

There is some evidence that willingness to pay for environmental services is related to levels of income and education: a study by Buckley et al. (2016, p.436-438) of how willing Irish people were to pay for improvements in river water quality found that there was less willingness to pay amongst those from social classes associated with lower incomes; the same study also found that those with a college degree were more willing to pay for water improvements.

Given the above, it would appear that those opposed to the new domestic water service charges did not represent the majority of the Irish public, either in number or attitude. Nevertheless, the Government's response was not to proceed with the planned introduction but instead to implement a series of amendments to the initial scheme, culminating in the suspension of charges in 2016 and the subsequent recommendation in 2017 that they be abolished and a refund issued to those who had paid. It is, therefore, likely that this response was also influenced by political factors: some observers were of the view that it was fuelled in part by the realisation among elected representatives that the controversy around the charges would affect their ability to be re-elected in the next general election (Irish Independent, 2014; Little, 2017, p.486) despite the data available to suggest this was not likely to be the case.

Table 1: Attitudes towards paying for environmental services in Ireland: 2000-2013

YEAR	FINDINGS	SOURCE
2000	20% were willing to pay higher taxes, 18 % willing to pay higher prices and willing to make cuts in their standard of living'	Drury, 2000.
2003	53 % willing to pay higher prices than pay higher taxes (34 %)	Kelly et al., 2003
2013	50% preferred a 'pay by use' system, 34% a flat charge and 16% an increase in general taxation as a means of paying for water.	O'Sullivan, 2013.
2014	13% of Irish people surveyed for the EU Eurobarometer report were in favour of introducing or increasing taxation on environmentally-damaging activities while 30% were in favour of higher financial incentives to citizens to protect the environment	TNS Opinion & Social, 2014.
2014	Almost 40% of respondents reported that they did not pay attention to the amount of water that they used while 68% stated that the re-introduction of a water charge would change their water usage.	Davies et al., 2014

6. Conclusion

When a policy fails, it is essential to understand why, so as to assist future policy development. The factors driving opposition to the introduction of domestic water charges in Ireland appear to have been multiple and complex in nature, combining political and personal circumstances around the time of introduction as well as in preceding decades. Consequently, any future attempts to resolve them are also likely to be complex and time-consuming. Addressing issues relating to people's social and economic circumstances is, obviously, a key task of government, through ongoing commitment and initiatives to tackle issues such as poverty, social exclusion and inequality. On its own, however, this will not be sufficient to address the other factors identified, which are a crucial part of achieving the positive buy-in required from all public water service users to ensure the sustainable provision of these services over the longer-term. It is also arguable that citizens need to take more responsibility and that it is too simplistic to talk about a 'right to water', rather, as Camkin & Neto (2016,

p.108) state, “...although governments have a primary responsibility to ensure that an effective water governance regime is in place, it is not the responsibility of government to carry out all the functions of water governance—it is a shared responsibility of water users, representative organizations, social and environmental advocates, and the broader community, each with its own set of rights and responsibilities”.

In this regard, as Russell & Fielding (2010, p.1) point out, water demand management “...involves as much attention on water use behaviour as it does on technology or infrastructure”. Inducing behavioural change will require a re-framing of how water services can, and should, be funded and managed. This requires a willingness of the differing stakeholders to come together constructively to voice and explore their divergent frames; they must also be prepared to revise, enlarge or change the way they relate to the disputed issue and to each other if mutual understanding and common action are to be achieved (Dewulf et al., 2015, p.115-8). This is likely to be a challenging task in the Irish situation, given the levels of mistrust and deeply-held perspectives that have characterised the debate so far. It is also going to be a monumental challenge given the lack of policy credibility that the Irish Government has regarding water services. While controversial, the refund of water charges paid perhaps reflects this concern by government. If the charges had not been refunded to those who paid, would otherwise law-abiding citizens refuse to pay other government charges?

There is also some evidence that the framing and interpretation of water charges by the Irish public has been inconsistent in that polls suggest people agree both with a right to water concept but also agree that everyone should pay something as it is precious⁴. Such inconsistency is not uncommon and Lakoff (2010, p.74) states starkly that “many people have in their brain circuitry the wrong frames...that would either contradict the right frames or lead them to ignore the relevant facts” and points to the significant challenges involved in addressing such inconsistency and replacing “faulty” frames: “Those wrong frames don’t go away...What is needed is a constant effort to build up the background frames needed to understand the crisis, while building up neural circuitry to inhibit the wrong frames. That is anything but a simple, short-term job to be done by a few words or slogans”. This challenge is echoed by Convery (2013, p.5) in relation to the Irish water charges, where he states that the focus should be on the losses that will be incurred if they are not introduced - such as increases in taxation and prices, impacts on competitiveness and, not least, “the loss in reliability of water supply and its quality if a sustainable funding system is not in place that encourages conservation”.

However difficult the challenges, the chances are that they will have to be faced at some stage,—not least because there is a reasonable prospect that the issue will return to the fore in the not-too-distant future. Firstly, there is the possibility that the recommendation to return a system of funding water services through general taxation will not be permitted under the Water Framework Directive. Secondly, there are no guarantees that the previous failed legacy of funding water services through taxation will not be repeated, especially in the context of the urgent investment required in other sectors such as health; as one commentator states: “...the idea of funding water from “general taxation” is a scandal when the billions needed to fix the system over the next five-to-10 years will compete with the desperate needs of a health service that saw a 103-year-old woman spending 15 hours on a [hospital] trolley...” (Molloy, 2016). Research conducted by the Revenue Commissioners indicates that the general public may implicitly know this, since they associate paying tax with funding health and social welfare services but less so with financing other services; the same survey also states that they are largely correct in this association (Revenue Commissioners, 2013, p.43-33).

The 2017 parliamentary committee report has recommended that the Irish Government must provide funding certainty for water services from general taxation (Houses of the Oireachtas, 2017, p.7) but it remains to be seen if, and how, this will be implemented. Any repeat of previous failures to invest adequately in water services may also have implications for economic growth and job creation. According to the United Nations World Water Assessment Programme (UNWWAP) (2016, p.7), “Sustainable water management, combined with access to safe and reliable supply of water and appropriate sanitation services, create an enabling environment for employment opportunities to develop and grow across economic sectors”; consequently, the

⁴ For example, a poll of over 1,000 adults published in March 2017 found that just over 50% of respondents agreed that “*Water is a human right. No charges should exist for water, no matter how much is used*”; however, 70% of the same respondents subsequently agreed that “*Water is a precious resource. Everyone should pay something for water and in particular those who use more than a reasonable amount*” (Irish Independent, 2017).

failure to secure an adequate and reliable supply of water can have economic and employment repercussions that can go far beyond the immediate affected areas (UNWWAP, 2016, p.2). Finally, a decision to return to general taxation funding may be yet another instance of Irish politicians postponing a controversial decision in order to avoid any electoral fallout:

Nevertheless, the political system will be extremely wary of returning to the water charges issue in the near future. When it comes to water services, political, social and environmental uncertainties can make water problems 'wicked', in the sense that that even the most innovative technical responses can generate unexpected, unintended or undesirable outcomes (Wolfe & Brooks, 2016, p.1). Thus, there is a need for further consideration of the psychological and behavioural factors influencing citizens' attitudes towards paying for water services.. This is particularly important when, as we have seen, both governments and individuals can be liable to frame contested issues in apparently logical and justifiable terms that may actually mask underlying attitudes and perceptions that can be resistant to change. As T.H. Huxley put it over one hundred years ago, *"It is not to be forgotten that what we call rational grounds for our beliefs are often extremely irrational attempts to justify our instincts"* 1894/2011, p.310). In early Ireland, water was sometimes used by our Celtic forbears as a symbol for spiritual trials (Muhr, 1999, p.204). It remains to be seen whether the funding of water services in modern Ireland continues to be a source of similar trials or whether diverging stakeholder attitudes can be sufficiently reconciled, and the timing is right, to provide services that are sustainable from economic, social and environmental perspectives.

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