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Public water without (public) financial mediation? Remunicipalizing water in Valladolid, Spain

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ABSTRACT

We discuss the water remunicipalization process in the city of Valladolid (Spain), focusing specifically on its public financing model. Valladolid water remunicipalization has been a politically driven process, but implemented and managed in a technical way, through a public 100% municipality-owned company. As we show, it does not require the additional participation of financial intermediaries, public or private. The Valladolid remunicipalization process has been largely successful, with efficient financial and technical management, including some equity and environmental considerations, although it is not free from financial challenges that could cause it to totter in the future.

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Introduction

After decades of academic discussions on the benefits and negative dimensions of water privatization across the globe (e.g., Bakker, 2005, 2007; Budds & McGranahan, 2003; Swyngedouw, 2005), there is broad consensus around the idea that public water utilities can be just as efficient as their private counterparts, and in some cases more so (Bel et al., 2010). The lack of satisfaction by local governments with private water providers have pushed many municipal authorities to seek alternative modes of provision (Bel et al., 2018), either returning to public services (remunicipalization) or creating new public services (municipalization). However, while (re)municipalization has gained momentum and has been portrayed by some political movements, activists and academics as a transformative change that could embrace radical visions of society around autonomism and anticapitalism, empirical research has also shown that many (re)municipalization processes can be labelled socialdemocratic (McDonald, 2018) or even part of a 'pragmatic market management process' (Clifton et al., 2021, p. 293). As such, much of the recent literature on water remunicipalization focuses on whether the processes have been fundamentally driven by ideological and political reasons, or technical or economic causes (Hanna & McDonald, 2021).

Regardless of their motivations, remunicipalization processes need to be accompanied by solid transition plans, of which public financing and public banks can play an important role. In this sense, the classic discussion about the role, functions and effectiveness of public banking - which Marois (2022) labels as orthodox/ political versus heterodox/developmental views - has been revived in recent years. In the view of many public bank advocates, public banking could play an important role by complementing the financing that private banks cannot or do not want to cover, especially in areas related to infrastructure, as well as helping to achieve certain socio-economic objectives by playing a countercyclical role, helping to stabilize the economy and reducing the intensity of crises.

This resurgence of interest in public banking has inevitably crossed paths with debates about how to finance public water due to the volume of investment required to provide universal and equitable access to safe and affordable drinking water and adequate and equitable sanitation and hygiene to all the world's inhabitants (at least US\$150 billion per year) (World Bank, 2017). It is in this context that, theoretically, public banks could play a key role in financing infrastructure related to the water cycle (McDonald et al., 2021). But there can be no predetermined role for public banks. As Marois (2021, 2022) rightly points out in his anti-essentialist proposal for a 'dynamic' consideration of public banking, what is really relevant is not the nominal ownership of a particular banking institution, but the actual behaviour of that bank; that is, how the public bank carries out its financial activity beyond its mere ownership form within the 'structural confines of gendered, racialized, and class-divided capitalist society' (Marois, 2022, p. 357). In other words, the potential for public banks to play a progressive role in public water services required close contextual examination.

This debate about public water and public banks is still in its infancy, with relatively little case study analysis to date. This is particularly true when it comes to the remunicipalization process (although other aspects of remunicipalization have attracted growing attention by policymakers, activists and academics, especially in Spain which has witnessed growing interest in the topic) (Kishimoto et al., 2020; McDonald, 2018; Turri, 2022; United Nations, 2020). While some large Spanish cities are supplied by public water companies - including Madrid and Sevilla - the private sector has had a historically important role in urban water supply. This is true of Barcelona, Alicante and València, for example, with long-term water concessions or mixed-capital companies serving the bulk of their residents (March et al., 2019). Long seen as a depoliticized technical issue, with most citizens in Spain unaware of whether they were supplied by a public or private operator, the issue has been politicized of late (Villoria et al., 2020; for recent surveys on citizens preferences for public water management, see also AMAP, 2019; Barcelona City Council, 2019).

These new struggles have positioned Spain at the centre of the so-called 'remunicipalization wave' (Kishimoto et al., 2020; Turri, 2022). While in the first international review of water remunicipalizations Spain was not mentioned (Pigeon et al., 2012), three years later the survey highlighted Spain as having the second highest number of remunicipalizations in Europe, after France (Kishimoto et al., 2015). This trend can be explained in part by the fact that in these two countries private delivery enjoys a high rate of participation under concession contracts (Bel, 2020) - the so-called 'French model' of water provision - while in countries such as Germany only 12% of water is delivered by private companies, and in Italy it is 11% (McDonald et al., 2021), creating a much larger pool of potential remunicipalizations in Spain and France.

Moreover, the effects of the global financial crisis in Spain positioned remunicipalization as a way to rethink public services in a context of austerity policies and multiple corruption scandals (Jakob & Sanchez, 2015; Kishimoto & Petitjean, 2017; Villoria et al., 2020), while new anti-austerity municipalism created a favourable environment for remunicipalization (Planas, 2017). By the end of 2019, the global list of water (re) municipalizations rose to 311 cases, with 38 of them in Spain. These surveys, led by the Transnational Institute (TNI) (in collaboration with grassroots and civil society organizations, trade unions, scholars, and public officials) have shown the leading role of Spain regarding water remunicipalization and offered some paradigmatic cases (Kishimoto & Petitjean, 2017; Kishimoto et al., 2020).

Arguably, three Spanish cities have concentrated most of the recent attention, namely Barcelona, Terrassa and Valladolid (with the latter being the focus of this article). Barcelona is an example of how remunicipalization faces important economic, legal and political barriers (March et al., 2019), with the city government putting its plans for remunicipalization on hold (as of December 2021) while focusing on streamlining the governance of water and adding more public control towards the operation of the public-private mixed-capital metropolitan company (Aigües de Barcelona, with most capital in private hands).² The nearby city of Terrassa, on the other hand, is seen as a successful case of water remunicipalization, as is Valladolid in the north-west part of the country.

In this paper, we analyse water remunicipalization in Valladolid, focusing on the financial aspects of the process. We look specifically at the relationship between the new municipal public company (AquaVall) and its connections with the national-level Spanish public bank Instituto de Crédito Oficial (ICO). Our research reveals a very weak public banking/public water relationship, for two primary reasons. First, as a consequence of the evolution of public banks in Spain, they have virtually no participation in the financing of the urban water cycle. Second, the public financing model on which the water remunicipalization process in Valladolid is based has made it unnecessary to seek, at the present time, additional sources of funding. There are strengths and weaknesses in this financing model which we explore.

Research for this paper is based on a combination of document analysis (e.g., a review of public banks financial accounts and budgets of water operators) and eight semistructured interviews with senior staff of Spanish and regional public banks (the ICO and the Institut Valencià de Finances - IVF), as well as with politicians and managers involved in the Valladolid remunicipalization process (see Appendix A in the supplemental data online).

The remainder of this article is organized as follows. In the next section we explain the process of water remunicipalization in Valladolid. We then turn to study the public financing issues related to remunicipalization, analysing both the reasons for the almost non-existent relationship in Spain between public banking and public water and the specific public financing model for remunicipalized metropolitan water in Valladolid,



while comparing this with other successful remunicipalization processes in Spain, notably that of Terrassa. Finally, we discuss the challenges that the remunicipalized water company in Valladolid faces and its possible future developments, and conclude with some final remarks regarding the potential of public banks to play an active role in the public water sector in Spain.

Water remunicipalization in Valladolid (AquaVall)

Valladolid, the most populous city of Castilla y León with almost 300,000 inhabitants, is located in the centre of the Duero Basin approximately 200 km from Madrid. Following the local elections of 2015, which saw the emergence of new left-wing local coalitions in many Spanish cities (Piñeira et al., 2019), the town council of Valladolid underwent a radical shift after 20 years of conservative local governments. Three social-democratic and left-wing parties agreed to form a new government, led by the Socialist Party (PSOE) (with eight city councillors) in coalition with the left-wing political platform Valladolid Toma la Palabra (VTLP) (four councillors), while Sí Se Puede Valladolid (three councillors) supported the change without assuming government responsibilities. The latter did not win seats in the 2019 local elections, and therefore the coalition was reduced to the Socialist Party (11 councillors) and VTLP (three councillors). Importantly, in the context of the upcoming termination of the 20-year water concession to a private supplier in July 2017, the pledge to recuperate public water provision in Valladolid was stated in the electoral programmes of both parties.³

After the change in Valladolid's government in 2015, the town council prepared a technical report and established a mixed political-technical commission to explore four different scenarios for water services: (1) direct service provision by the city council; (2) the creation of a new public company ('entidad pública empresarial'); (3) the creation of a mixed-capital utility together with the former private supplier; and (4) renewal of the private concession by opening a new public tender (Valladolid City Council, 2016).

The report assessed the four options based on economic/financial criteria concluding that:

direct management options, both by the city council itself or through a public company, have greater economic profitability since they achieve the execution of all necessary investments for the integral water cycle with the lowest tariff increase and with a cash surplus from the seventh year. (Valladolid City Council, 2016, p. 68; all translations by the authors)

Besides financial sustainability criteria, the report also argued that direct and public service provision was more adaptive and flexible because it 'is not conditioned by the commitments made to the partner or concessionaire', while in concessions or the mixedcompany model, 'the administration cannot vary the conditions, no matter how much the social or economic circumstances of the public service change, without negotiating the corresponding contractual modifications' (Valladolid City Council, 2016, p. 68).

Among the two models that were 100% public (direct provision or creation of a public company), the report noted that the traditional under-investment by the previous town council conservative governments did not guarantee the rate and volume of investments required to sustain the water system, in part due to the limitation of public spending imposed by the Spanish Budgetary Stability Law for municipalities (Valladolid City Council, 2016, p. 69). Therefore, the chosen option was the creation of a public (100% municipality owned) water company, assuming urban water provision and sewerage treatment, and a new external chief executive officer (CEO) from the private sector was hired (interview 2).

The remunicipalization process was initially ridden with judicial warfare, with over 10 legal proceedings against it - all of them satisfactorily overcome (ÚltimoCero, 2019) including a Spanish law (later declared unconstitutional) that aimed to make difficult the subrogation of workers from the private to the public company. In the words of one councillor: 'a remunicipalization process is an obstacle race' (interview 1). Hence, in July 2017, after the termination of the private water concession, the newly created public water company AquaVall took over the water supply of the city, as well as supplying another five municipalities in its metropolitan area through non-profit bilateral agreements. All in all, political representatives of Valladolid and managers of AquaVall argue that this has been a successful remunicipalization, reflected in part by the fact that they have been able to keep water at an affordable price (interviews 1 and 2).

As at the end of 2021, AquaVall manages the entire water cycle in Valladolid, from the extraction of raw water to its distribution, as well as wastewater treatment. The wastewater treatment plant, built in 1999, is relatively new; however, the two plants – built in 1886 and 1955 - where extracted water from the Pisuerga and Duero rivers is treated, are much older (AquaVall, 2021c). The water distribution network is also dated, with an average age of 26.3 years (20% of the water network is more than 55 years old), while a third of the sewerage network is over 60 years old (AquaVall, 2021b). Given its ageing, all this infrastructure may require major new investments in the coming years and decades.

Public financing of public water: the Valladolid case in the Spanish context

A discussion of public banking in the remunicipalization of water in Valladolid first entails laying out some key details of how public banks operate in Spain, and why they have not been deeply engaged with water projects (not to mention water remunicipalizations, where they have been completely absent). We then turn to explore how, despite this lack of public water/public banks connection, AquaVall managed to set up a public financial model that has facilitated its operation.

Challenges for public bank financing of public water in Spain

The origins of public banking in Spain go back to the creation of a series of sector banks in the late 19th and early 20th centuries, which focused their activity on the financing of specific industries or activities, or financing of local entities. In 1962, public banking was regulated through the nationalization of banks and sector institutions, and the creation of the Instituto de Crédito a Medio y Largo Plazo (ICMLP - Medium- and Long-Term Credit Institute), which was the predecessor of the ICO (Martín-Aceña et al., 2016) and had the task of coordinating and inspecting the Entidades Oficiales de Crédito (EOCs official credit institutions). This coordination function did not work well because of the EOCs' different legal and management systems, and led to a new reorganization of public credit in 1971, when the ICO was created with legal attributes (which the ICMLP did not have) to be the institution responsible for coordinating and providing the necessary funds for the EOCs to comply with their sectoral financing obligations.

During the second half of the 1980s, the EOCs underwent important legal and operative transformations. First, they were redefined as 'credit institutions' and subjected to the information coefficients and obligations to which other credit entities had been subject hitherto. Second, in 1988 the ICO was configured as a state-owned financial institution that assumed the ownership and tenure of shares representing the capital stock of the EOCs.4

This public bank holding headed by the ICO lasted only three years due to a 1991 reform which privatized it, with the exception of the ICO itself which remained independent and became the only public financial institution in Spain. The ICO was recognized as a financial agency of the state, and it was established that its objectives included:

the maintenance and promotion of economic activities that contribute to growth and to the improvement of the distribution of national wealth, and, particularly, of those activities that, because of their social, cultural, innovative or ecological significance, deserve to be promoted. (RD-L 12/1995)

Currently, the ICO continues to operate in its double mandate of state financial agency and credit institution (ICO, 2021a). As a state financial agency, it carries out the financial operations mandated by the central government. These operations are funded by the state, and the ICO behaves as a manager or mediator, passing on the costs to the state and receiving a management fee or compensation subtracted from the interest rate differentials (ICO, 2021b, p. 13). As a credit institution, its task is to finance productive medium- and long-term investment projects carried out by private firms and socialeconomy institutions in those financial spheres that are considered necessary for the development of certain sectors or regions not entering into competition (added emphasis) with private commercial banks.

The ICO is therefore a financial instrument of Spanish economic policy that can be developed in collaboration with ministries and regional and local governments. In addition, the ICO channels and manages EU resources in collaboration with the European Commission, the European Investment Bank (EIB) and the European Investment Fund (EIF). In all these areas of action there would be the possibility of financing investment projects that involve the water cycle because it is a Spanish institutional commitment in relation to the United Nations' (UN) Sustainable Development Goals (SDGs). As the next section will show, funding for the water sector is a very small part of the ICO's lending activity, as was confirmed in our interviews (interviews 3-7).

ICO's credit activity

From the beginning of its solo venture, the ICO's trajectory has been limited by its size. At the end of 2021, its staff consisted of only 350 people, and it had a single office in Madrid. In spite of this, its collaboration with private banks in mediation lines has allowed for a much larger scope of investment in small- and medium-sized firms.

The ICO's market share, measured by its deal flow compared with that of the private credit system, has been estimated at only around 2% in the last few decades (ICO, 2021b, p. 50). Notable, however, is that the ICO's credit activity increased during the financial crisis of 2008–09, offering a clear example of the counter-cycle capacity of public banking in Spain.

In relation to the funding of public water and public sanitation operators, information provided by the ICO is not disaggregated by the borrower's public ownership or lack thereof. Nor was it possible to obtain information at this level of disaggregation in the interviews with bank staff members (interviews 3 and 6). In effect, the only information available on water-related funding is the aggregate of the categories 3600 ('Water collection, purification and distribution') and 3700 ('Wastewater collection and treatment').

Figures 1 and 2 show the direct funding and mediation activity of these water-related categories of the CNAE, which are included under the heading 'water sector' in the ICO statistics. Even though direct funding operations have been carried out since 1992, they are scarce and inconsistent across time. Only between 2005 and 2012 was significant and regular water financing activity observed. Regarding mediation operations in the water sector, they have been performed since 2010, when up to 355 operations were concluded totalling slightly over €88 million. From that year onwards, water activity has progressively decreased, and by mid-2021 was almost non-existent. Finally, regarding risk capital, the branch of the ICO devoted to risk capital investment – AXIS – manages a fund (FOND-ICO Infraestructuras ESG) designed to finance infrastructure projects related to transportation, energy, the environment, and water and waste – but no water project has been funded to date (Axis, 2021).

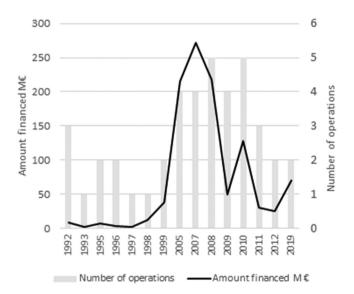


Figure 1. Direct funding activity from the Spanish public bank Instituto de Crédito Oficial (ICO) to water activities (categories 3600 'Water collection, purification and distribution'; and 3700 'Wastewater collection and treatment' of the *Clasificación Nacional de Actividades Económicas* – CNAE – National Classification of Economic Activities), 1992–2019.

Source: Authors' own elaboration from data provided by the ICO's senior management staff.

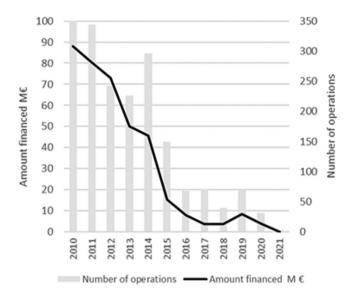


Figure 2. Mediation activity of the Spanish public bank ICO in relation to water activities (categories 3600 and 3700 of the CNAE), 2010–21.

Source: Authors' own elaboration from data provided by the ICO's senior management staff.

According to our interviews, the ICO's very limited credit activity in the water sector is explained by two reasons: first, the ICO does not compete with private banks and only finances activities under-financed by the private sector when borrowers request it; and second, because the ICO does not have the capacity to open new lines of work (e.g., visiting small municipal water operators to offer financing due to its small size and number of employees) (interviews 3–7).

AquaVall's public financing model

Spain is a decentralized country in terms of public finance, with different sub-central levels of government. The Law regulating Local Public Finance (*Ley Reguladora de las Haciendas Locales*) and the Law regulating Local Regime Basis (*Ley de Bases de Régimen Local*) assign to municipalities the legal power, and hence the obligation, to provide and finance public drinking water and sanitation. Such access to water can be managed directly by the municipality or through a concession to a company (private, public or mixed), and is usually financed by tariffs or fees.

Traditionally, the mainstream legal interpretation regarding the differences between fees and tariffs in Spanish's local public finance has been based on the management model of the service considered (water, in this case). If it is directly managed by the municipality itself the payment would be a (user) fee, while if it was indirectly managed (by means of a concession to a public or private company) the payment would be a tariff. Although some fiscal differences may be relevant, in both cases the municipality plays a role to determine, or at least influence, the price conditions (fixed and variable charges, block tariffs, etc).

However, Law 9/2017 on Public Sector Contracts (transposing into Spanish law some Directives of the European Parliament and of the Council) introduced into the Spanish local tax system the consideration of water tariffs as a kind of 'non-tax public revenue'. A recent Spanish Constitutional Court ruling (Sentencia del Tribunal Constitucional de 9 De Mayo de 2019 sobre las tarifas de los servicios públicos coactivos en la Ley De Contratos Del Sector Público 9/2017) has also come to establish that both tariffs and fees are possible financing mechanisms for municipalized services, and that in the case of tariffs (applicable when management is carried out by concessions to public or private companies), despite being a non-tax instrument, they maintain core elements of 'publicness' - that is, coerciveness, and regulation by a municipal ordinance, pending on a mandatory previous report from the Autonomous Community that has to authorize water rates. Additionally, the Spanish Constitutional Court ruling stated that the tariffs charged may exceed the costs of the service.

Regarding municipal water-pricing, the Spanish map is particularly complex. First, there are enormous regional differences in terms of geography and climate. Second, there are multiple governmental levels - including water basin agencies (Confederaciones Hidrográficas) which usually operate under the jurisdiction of several Autonomous Communities, involved in the design of water policy.

In the more than 8100 Spanish municipalities that exist the different downstream water provision and the multiplicity of management models (direct provision; concession to public, private or public-private companies; consortium of municipalities; Arbués & García-Valiñas, 2020) have led to different pricing structures, not to mention that different users (residential, industrial) may also face different schemes (García-Rubio et al., 2015). In any case, the widespread pricing model consists of a fixed charge and a variable part based on an increasing block tariff. It is worth mentioning the existence of 'social' tariffs for vulnerable groups in many municipalities, with the aim to guarantee access to basic water consumption. Adding to this complexity is the presence of buildings equipped with collective water meters, to which a general tariff is applied, paid collectively by all households in the dwelling. Last, but not least, pricing systems are often differentiated for water and wastewater: collection, treatment and discharge of recycled water (García-Valiñas & Arbués, 2021).

The financing model for public water in Valladolid includes many of the elements discussed above, although with some particularities. First, it is important to recall why a public company was created instead of choosing direct delivery by the municipality. Once it was decided to remunicipalize water supply, technicians assessed the management options available based on financial criteria through 15-year cash flow forecasting (Table 1). Importantly, the report noted that the traditional under-investment by the previous municipal conservative governments did not guarantee the rate and volume of investments which required the integral water cycle, while these investments could threaten other municipal policies and programmes due to the limitation of public spending imposed by the Spanish Budgetary Stability Law (Valladolid City Council, 2016, p. 69). Therefore, the chosen option was the creation of the public water company AquaVall, assuming urban water provision and sewerage treatment.

The aim of the CEO of AquaVall, who had extensive experience in the private sector, was to set up a public company as autonomous from the municipal authority as possible, to reduce financial dependence. Thus, AquaVall opened up a competitive tender (accepting bids from both public and private banks) for a credit line of €6 million to bridge the initial financial gap before revenue from water bills came in (interview 2).

Table 1. Water services scenarios envisioned in Valladolid's remunicipalization technical report.

Water service management options	Minimum annual change of tariffs (to recover the required investment of €178.5 million)	15-year accumulated cash flow (under changing tariff increases)	15-year accumulated cash flow (under a fixed tariff increase of +0.92%)
Direct service provision by the city council	+0.92%	€186.1 million	€186.1 million
Service provided by a new public company	+0.97%	€186.5 million	€184.8 million
Service provided by a mixed-capital utility	+1.83% ^a	€173.2 million	€149.3 million
Service provided through a private concession	+2.20% ^b	€126.9 million	€93.9 million

Note: ^aConsidering 5% profitability for the private partner and 51% public participation.

^bConsidering 5% profitability for the private supplier.

Source: Valladolid City Council (2016, pp. 65-68).

Eventually, five private banks bid to offer the credit, and AquaVall subscribed a cash advancement with La Caixa (interviews 1 and 2). However, only €2.2 million of the €6 million were used, and once revenues began to flow the line of credit was cancelled. It is relevant to mention that not a single public bank made a bid (interviews 2 and 3), and while the manager of AquaVall recognized that public banks could have had a more active role in such a process, he also stated that he does not know if public banks are aware of the needs of public water operators (interview 2). This lack of awareness was underscored by our interviews with ICO staff (interviews 3–7), who, although they showed interest in the water sector, and are willing to meet with people involved in the remunicipalization (interviews 3–7), stated that they do not know the specific financial needs of these processes.

As a result, since its remunicipalization in 2017, AquaVall's water and sanitation service has been financed entirely through tariffs (interview 2), with different tariffs for water, sewerage and wastewater treatment and purification. In fact, since its short-lived line of credit, AquaVall has not needed any financial intermediaries (public or private) given the income stream generated from water bills, leading to a 'very extensive cash flow' situation (interview 1). The cornerstone of this is a 'closed-circuit financing system' with a tariff structure that allows the company to be self-sufficient: 'nothing goes out, there are no benefits or dividend distributions; everything reverts to investments or investment reserves' (interview 2).

AquaVall's tariffs (all figures hereafter are from AquaVall, 2021d) are structured in a dual model – domestic versus industrial, commercial and services users – plus some additional tariffs to cover other circumstances of lesser relevance (water tariffs for works, prices for meter supply and maintenance, inspections and repairs, etc.). For both domestic and industrial/commercial users, a two-part pricing structure is observed, with a quarterly fixed charge, plus a variable charge according to the amount of water consumed, based on an increasing block structure. This block tariff implies not only an explicit commitment to the benefit principle – characteristic of contemporary local public finance – but also a disincentive for 'excessive' consumption, a concern for environmental issues, and a preference for equity.

According to the calculations of the most recent comparative study of domestic-use water tariffs in the 57 cities with the largest populations in Spain (FACUA, 2021), AquaVall's tariffs are among the ten lowest. In fact, the price in Valladolid is 35% cheaper than the average Spanish city (FACUA, 2021). Specifically, the study calculates a price for a typical

Valladolid household of three members and a consumption of 9 m³/month (costing €9.62/ month), which would rise to €14.56/month for a consumption of 13 m³/month.⁵ For comparative purposes, identical consumption in the Spanish city with the lowest tariffs in 2021 (León) was €4.85/month and €7.30/month, respectively, while the most expensive city (Ceuta) had prices of €28.04/month and €34.74/month.

For domestic-use tariffs, some additional elements should be noted. First, there is a tariff discount (AquaVall, 2020) for low-income households, ⁶ as well as for large families – in both cases with significant reductions in the fixed charge and in the first consumption block. Second, tariffs have remained unchanged since 2017 (interview 2), which has had positive equity benefits during the most difficult months of the Covid-19 pandemic. And finally, AquaVall assures that no household (industries are not considered here) has been cut off from supply due to late payment or non-payment (interview 2).

As of 2021, only four years after its creation, the public company has already invested around €35 million to improve water services, 30% higher than the investments made in 20 years of private management according to AquaVall (2021b). It is also important to mention that during the private concession's supply the town council was receiving some €6 million per year as a canon paid from the private concessionaire; however, very little of this money was invested in the water network (interview 1). By contrast, AquaVall has invested heavily in infrastructure, with three-quarters of funds in the past four years going towards supply and sewerage networks. The remaining investments have been aimed largely at improving the two drinking water plants and the wastewater treatment plant (AquaVall, 2021b), with an important emphasis on the water-energy nexus, shifting to renewable and green energy and enhancing energy efficiency (interview 2). According to the councillor for the environment, the town council is not worried at all about the financial future of the company (interview 1), because they can generate some €15 million per year of income while investing €10 million on a year in the water system, a figure that is close to being achieved (interview 2).

In short, the Valladolid/AquaVall case illustrates how a publicly owned and managed water company can operate sustainably with a tariff structure based on principles of local public finance, environmental considerations, increasing block tariffs and progressive social considerations (such as not cutting off a household's water supply for nonpayment). The success of this model can be attributed in part to a well-designed strategic plan and business model (with a 30-40-year time horizon), with sufficient cash flow to amortize equity, maintenance and real estate (interview 2). The cornerstone of this is a politically oriented but technically and financially grounded tariff structure that allows the company to be self-sufficient and to design a public 'closed-circuit' financing system. These features, in our view, are the elements of a genuine public finance/public water model that takes into account not only efficiency considerations but also issues of equity and environmental sustainability, without financial intermediaries involved.

Comparing the financing of two cases of remunicipalization: Valladolid and Terrassa

It is also interesting to compare Valladolid with the other recent successful water remunicipalization in Spain - that of Terrassa - and in particular their differences in terms of financing the remunicipalization process and how this may impact the viability of the public water supply. In July 2016, the City Council of Terrassa approved a motion to bring water supply back into public management at the end of a 75-year concession contract with the private operator Mina, whose main shareholder was AGBAR, a subsidiary of Suez, which had controlled the water services in the city since 1842 (Grau-Satorras, 2018). In 2018 the remunicipalization process was concluded with the creation of the public water operator Taigua, a local public company fully owned by the municipality, responsible for capturing, treating and distributing potable water, as well as managing and collecting water bills (Satorras et al., 2020). In parallel, in 2019, the city created the Terrassa Water Observatory (Observatori de l'Aigua de Terrassa - OAT) to enable and foster citizen participation in the definition of water policies and strategic decisions affecting the municipal water supply service (Bagué, 2020; Planas & Martínez, 2020). While the water services of Terrassa and Valladolid were remunicipalized practically simultaneously, the processes and outcomes largely differ due to the differences in the duration and the type of contract maintained (in Terrassa the private concession started in 1842, whereas in Valladolid it only lasted 20 years). In addition to the social consequences of such distinct histories and relationships with the private counterparts (e.g., for historical clientelism in the case of Terrassa, see Bagué, 2020), these differences may influence the municipality's ability to regain control over the water cycle. For example, as we will develop below, Mina continues to operate and control important parts of the water service in Terrassa.

In economic terms, Taigua differs from AquaVall in three ways. First, to cover the initial cash flow gap before revenues arrived, Taigua obtained a credit policy directly from the Terrassa City Council which was cancelled after a few months (Taigua, 2018, pp. 31-32; 2019, p. 2). This strategy contrasts with the commitment expressed by the AquaVall CEO to remain financially autonomous from any public institution. Second, the structure of revenues from both operators, and therefore their resulting profits, are highly different. On average, 42% of AquaVall's revenues come from water supply, but the remainder is generated through sewerage and wastewater treatment tariffs (34% and 24%, respectively; AquaVall, 2021a). Taigua, by contrast, is only in charge of water supply and purification, while sewerage services (previously fully managed by the municipality) have now been partially licenced to a private company (Diari de Terrassa, 2020; Terrassa City Council, 2021). Wastewater treatment is also managed through a private concession (Sorigue, 2021). Thus, although the social movements of Terrassa organized through the Water Observatory are demanding that local government bring the entire urban water cycle under the umbrella of Taigua (personal communication from OAT members, 25 November 2021), responsibilities and management remain fragmented. Moreover, the previous private company managing the Terrassa water service is still collecting the fees for water meter maintenance (included in the water bill) and leases key services and infrastructures to Taigua (such as software and office space; Taigua, 2020). As a consequence, the yearly profit before tax from Valladolid in 2021 amounts to approximately €10.3 million (AquaVall, 2021a), while in the case of Terrassa it is only €2 million per year (Taigua, 2020). Of course, these €10 million for Valladolid must also cover sewerage and wastewater investments, and the minor different population sizes between the cities should also be considered, but the difference in revenues are significant. Finally, regarding mid-term infrastructural investments, such as upgrading water distribution



infrastructures, Taigua is debating the possibility of funding them through private financial markets, while AquaVall is only considering the option of funding their investments through their own cash flow (interview 2).

Future challenges

In general, and as of 2022, it can be concluded from our analysis that the water remunicipalization process in Valladolid has been relatively successful despite the lack of intervention on the part of public banks. As a matter of fact, the financial dimension of the remunicipalization, in our view, was not the central concern of policymakers and managers of the remunicipalized utility as there were not large amounts of funds to be initially gathered (contrarily to other cases where remunicipalization entailed large sums of money to compensate the exiting private company). Rather it were the political, legal and managerial dimensions those that required more energies to sort out. In that sense, the process can be seen, following Hanna and McDonald (2021), as 'politically driven' (following a change of municipal government based in part to a commitment to remunicipalization), but 'technically resolved' (via professional managers, closed financial circuits, no external financial mediation - public or private -, quality supply, and strong investment in the network). Moreover, some 'social' components of the process should also be highlighted: public management (by a 100% public company) and public financing (by tariffs), tariff freezing (which implies one of the lowest prices in medium-sized Spanish cities), increasing block tariff structures, absence of cuts to households for nonpayment and environmental considerations.

Nevertheless, there are many challenges that AquaVall may face in the future. One of these is the cost of raw water, which AquaVall currently buys from the Confederación Hidrográfica del Duero (CHD) at a relatively low price, which facilitates its 'cheap' and progressive tariff structure. Should these costs rise it could weaken AquaVall's ability to self-finance. The possibility of this is real, with the CHD (2021, p. 23) noting that European legislation may cause it to pass costs to end users, including 'upstream water service for all uses, downstream water distribution for all uses, self-service, collection and treatment in public networks and outside public networks'. Their calculation, using 2018 prices, is that such total cost amounts to about €1.015 million per year, while all agents providing the services have obtained revenues from tariffs, fees and other recovery instruments in the order of €665 million, implying an overall cost recovery rate of only 65%. This implies, according to the CHD (2021, p. 230) that 'a large part of the environmental costs and a significant fraction of the financial costs are financed by subsidies', mainly due to the low recovery of environmental costs. The report states that for 'the case of urban supply use, the cost increase that would result from 100% cost recovery (both financial and environmental) is 0.057 €/m3 of water served, which for a family of 4 members is about 23.30€/month'.

Based on the current water services prices in the city of Valladolid, the potential increase in the CHD report would imply an increase of €70/quarter for the average household (from €35/quarter to €105/quarter). Naturally, the consequences for many households would be significant and, it is to be expected, with political consequences for popular support for the remunicipalization process, regardless of whether such a measure was forced upon AquaVall.

It is also true that Valladolid – along with practically all Spanish municipalities – rely on other public agents (Autonomous Communities, water basin agencies, etc.) to carry out additional parts of upstream water management and the financing of related infrastructure. This frees the municipalities from some substantial investments, suggesting that AquaVall's lack of need for external financing is at least partially connected to the fact that other (public) actors have been assuming some of the fundamental costs of the water cycle.

Nonetheless, there are some prospects of changing the trend in water financing in Spain, as shown by the recent consideration of a regional public bank in the financing of water supply. In particular, the Agència Catalana de l'Aigua's (ACA) Economic and Financial Plan 2021-2027 includes a new line of loans to local governments in Catalunya in order to finance the upstream water supply infrastructures through the regional public bank (Institut Català de Finances – ICF)⁷ for €20 million in 2021 (ACA, 2020, p. 10) and €9.4 million in 2022 (ACA, 2021, p. 12). Although this is aimed at upstream water supply infrastructure, and it only applies to one region in Spain, it is very relevant for two reasons. First, this is the first time that the ICF has considered financing any type of municipal water infrastructure and it is expected that the resources contributed will be permanent as the amounts returned will be used to make new loans. Second, it is a fund to finance the next calls for subsidies to the municipalities of the ACA; that is, there is the possibility of future connections in the financing of the municipal water supply downstream.

Finally, it should not be forgotten that in the case of Valladolid we are dealing with a remunicipalization process promoted by a political coalition of left-wing forces which included remunicipalization in their electoral programmes to win an election. But the judicial pressure that the municipal government has had to withstand has been significant, and the actors involved know they will continue to face pressure from hegemonic economic and political actors opposed to remunicipalization in the future (interview 1). Additionally, while beyond the scope of this paper, the shift of political alliances in Castilla y León's regional government in April 2022 may also open uncertain and uncharted terrains around water politics in the Autonomous Community.

The potential for a renewed neoliberal era of privatization is always a threat. In light of this, we wonder what role public banks, at the supranational, national and regional levels, might play in helping to sustain the long-term viability of public water in Valladolid in particular and in Spain more broadly.

Notes

- 1. The discussion of this issue is not the core element of this article and therefore we include both processes under the notion of (re)municipalization.
- 2. The shares of the mixed company Aigües de Barcelona (which manages the complete water cycle) are 70% owned by the Societat General d'Aigües de Barcelona (SGAB), 15% by CriteriaCaixa and the remaining 15% by the Barcelona Metropolitan Area (AMB) (see https://aiguesdebarcelona.cat/web/ab-corporativa/qui-som).
- 3. For the case of Valladolid Toma La Palabra (VTLP), see p. 45 of https://www.valladolidto malapalabra.org/wp-content/uploads/2015/05/Programa-Valladolid-Toma-La-Palabra -2015.pdf/. In the case of the Socialist Party (PSOE), see p. 21 of https://www.psoeava.es/wpcontent/uploads/2018/08/programa-electoral-municipal-2015.pdf/.



- 4. At that time the EOCs were integrated by the Banco de Crédito Industrial, Banco de Crédito Agrícola, Banco de Crédito Local and Banco Hipotecario de España. They also took over a large part of the shares of the Banco Exterior de España.
- 5. These figures are similar to those provided by one of the interviewers: an average family of three members, living in an apartment with no garden, pay on average some €35 for water supply and wastewater treatment every three months (interview 2).
- 6. With total household incomes below 1.5 times the IPREM, which, for 2021, is set in Spain at €565/month (see https://www.iprem.com.es/).
- 7. In Spain, in addition to the ICO there are other regional public entities destined to channel funds to finance projects of special economic or social relevance. The most representative are the *Institut Català de Finances* (ICF Catalan Institute of Finance) and IVF, which are, in fact, the only two Spanish financial institutions that are members of the European Association of Public Banks (EAPB).

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Appendix A: Interviews

Interview 1. Councilor for the Environment and Sustainable Development, Town council of Valladolid, July 2021.

Interview 2. CEO, AquaVall, July 2021.

Interview 3. ICO, Chief Investment Officer, July 2021.

Interview 4. ICO, Head of International Financing, July 2021.

Interview 5. ICO, Head of Corporate and Institutional Investment, July 2021.

Interview 6. ICO, Head of International Finance and EU Affairs, July 2021.

Interview 7. ICO, Member of the General Board, September 2021.

Interview 8. CEO, Institut Valencià de Finances (IVF), September 2021.