



Article

# Internal and External Transparency in Public-Private Partnerships—The Case of Barcelona’s Water Provision

**Monica Reig** <sup>1</sup>, **Mila Gasco-Hernandez** <sup>2</sup> and **Marc Esteve** <sup>1,3,\*</sup> <sup>1</sup> ESADE Business & Law School, Ramon Llull University, 08034 Barcelona, Spain; monica.reig@esade.edu<sup>2</sup> Department of Public Administration and Policy, University at Albany—SUNY, New York, NY 12222, USA; mgasco@albany.edu<sup>3</sup> Department of Political Science, University College London, London WC1E 6BT, UK

\* Correspondence: marc.esteve@ucl.ac.uk

**Abstract:** Despite the efforts devoted to open government, transparency is mainly considered an issue for public organizations. However, various tasks such as public services delivery and management are being increasingly privatized or outsourced to public-private partnerships (PPPs). Our study aims to contribute towards bridging this gap by answering two research questions: (1) What determines internal and external transparency in PPPs? and (2) To what extent does internal transparency contribute to external transparency? We answer these questions through a qualitative case study, consisting of 38 in-depth interviews, on the transparency in water provision and management in the city of Barcelona. We conclude that in the case of PPPs, transparency goes beyond making data available; thus, politicians and managers must build a narrative around the data they provide that guides citizens and partners in their interpretation of the information. Furthermore, our results show that internal transparency influences external transparency.



**Citation:** Reig, M.; Gasco-Hernandez, M.; Esteve, M. Internal and External Transparency in Public-Private Partnerships—The Case of Barcelona’s Water Provision. *Sustainability* **2021**, *13*, 1777. <https://doi.org/10.3390/su13041777>

Academic Editor:  
Andrés Navarro-Galera  
Received: 24 December 2020  
Accepted: 30 January 2021  
Published: 7 February 2021

**Publisher’s Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

In the last few years, there has been a substantial rise in hybrid forms of governance that have stressed the importance of collaboration in the many tasks that public organizations are responsible for. One of them is public-private partnerships “voluntary durable collaboration(s) between public and private organizations to ensure the development of infrastructures and services, sharing risks, costs and benefits” [1] (p. 2). In parallel, governments around the world have embraced the concept of open government. Although an open government is a transparent, collaborative and participative government, most of the efforts of public organizations have aimed to increase transparency around a number of important policies and issues by setting up transparency and open data portals and making information available through websites and social media platforms. These efforts have been heterogeneous in terms of both implementation strategies and outcomes [2]. Furthermore, they have shown that transparency is mainly considered an issue for public organizations, although various tasks such as public services delivery and management are being increasingly privatized or outsourced to public-private partnerships (PPPs) [3].

Although studies on transparency in public-private partnerships are scarce, they have widely recognized the difficulty for these collaborative arrangements to promote transparency that goes beyond the compulsory financial disclosures PPPs are bounded to and that vary according to context [4]. Along these lines, some authors have referred to the strong tensions within PPPs between efficiency and openness, the challenge of multiple accountabilities, the confidentiality requests made by private partners and the complexity of long-term contracts [5–8]. Despite these important findings, in general, previous research has mainly focused on acknowledging and describing the low level of transparency in PPPs

without explaining why collaborative arrangements fail to be more active in promoting transparency [9]. Moreover, previous studies have analyzed transparency in terms of either internal or external transparency [9], without further exploring the relationship between these two different types of transparency. Finally, only a few studies have recognized that transparency goes beyond the availability of information. For example, in his study about global health public-private partnerships, Reich [10] states that PPPs often decide to publish annual reports that include monitoring information on outputs produced by the PPP. “But these documents rarely contain negative information and usually do not compare performance to targets. The full data set is not usually publicly available or data may be aggregated in ways that mask results that could be viewed negatively (such as inequitable distribution across regions or income groups). In other cases, raw data are provided but in ways that are not easily understood by people who are not technical analysts or in ways that cannot be readily analyzed. The presentation of contents thus can shape whether the information is intelligible to different audiences” [10] (p. 242).

Thus, this is an under-researched topic that deserves closer attention. It is also a relevant topic, for transparency may lead to accountability by providing citizens and other external stakeholders with the information they need to assess the performance of public service delivery and management. In addition, building on previous studies on the general importance of transparency [11,12], we argue that a more accountable partnership may also be a more legitimate and trusted one. Therefore, our research aims to contribute to the existing literature on transparency in PPPs by answering the following research questions: (1) What determines internal and external transparency in PPPs? and (2) To what extent does internal transparency contribute to external transparency? We answer these questions through a qualitative case study, consisting of 38 in-depth interviews, on the transparency of water provision and management in the city of Barcelona. Our article makes three specific contributions. First, it investigates transparency in PPPs comprehensively, furthering on mandatory financial transparency. Second, it differentiates but, also brings together, the concepts of internal and external transparency in PPPs. Finally, it notes, as recent studies on transparency have also observed, that availability of information is a necessary but not a sufficient condition for transparency.

The remainder of this article is organized as follows. We start by examining existing literature about transparency in general and transparency in PPPs. The next section presents the case study context and the research design. Subsequently, we present and discuss the results of the fieldwork. Finally, we describe the theoretical and practical implications of our findings and answer our main research question. The article ends with a brief conclusion and a proposal of future research directions.

## 2. Transparency in Public-Private Partnerships

### 2.1. On Transparency

Transparency is probably the most studied component of open government, particularly in the last two decades [13]. Meijer [14] defines transparency as “the availability of information about an actor that allows other actors to monitor the workings or performance of the first actor” (p. 430). Matheus and Janssen [15] add that transparency is aimed at “overcoming [the] discrepancy in information [between the government and the public], thus enabling the public to view what is happening within the government” (p. 504). Transparency is therefore seen as a tool for external stakeholders to monitor the internal workings of an organization, prevent corruption and ensure due process [16].

In general, the literature on transparency has revolved around terms such as freedom of information, the Internet, active dissemination of information, access to documents and usability of websites [17]. The core question tackled by these studies has been: What is being made visible/transparent? Authors have therefore discussed, among other issues, the nature and scope of transparency, the usefulness of information and the timing of the release of documents. The premise underlying these studies is that transparency yields accountability. At the same time, a more accountable government is a more legitimate

one [12]. Finally, legitimacy strengthens public trust in the government [18–20]. Interestingly enough, recent studies have also noted that, empirically, the effect of transparency on governance is not straightforward, with greater transparency not always leading to the anticipated benefits [13,21].

Indeed, research shows that transparency does not always give rise to positive outcomes. For example, Cucciniello et al. [13] state that transparency is effective for achieving certain outcomes, such as increased participation, better financial management and less corruption but fails to engender trust in and legitimacy of government.

Studies suggest that efforts to be transparent are falling short because the tools that are being used do not seem to disseminate information in ways that are fit for that purpose [22]. Recent literature has echoed these assessments and has started to differentiate between the availability of information and transparency, stating that availability is a necessary but not a sufficient condition for transparency [20,23] and arguing that to evolve from information availability to transparency, information should be understandable and useful to citizens and other stakeholders [24,25]. As Ruijer [26] explains: “After all, unless the material that is disclosed can be followed, understood and assessed by its audiences, it may neither improve incentives for trustworthy performance nor provide evidence for placing trust in government agencies” (p. 7). As a result, the same author proposes a definition of transparency that focuses on “making available legally releasable information about a government organization, in a manner that is accurate, timely, complete and clear, allowing external actors to monitor the internal workings or performance of the organization” (p. 28). Ruijer [26] notes that this definition goes beyond the availability of information and it incorporates quality demands to the information but also, it implies a reaction from external actors.

The few studies that have differentiated between availability of information and transparency are mainly conceptual and have stressed the importance of a variety of elements including information usability, comprehensibility and fitness for use [14,23,27]. Others have indicated that when governments make information available through websites, these may be cluttered or may be difficult to navigate, hindering access to the information and therefore limiting transparency [28]. However, there is not enough empirical evidence that addresses how information specifically needs to be made available in order to become transparency.

## 2.2. Transparency in PPPs

In this article, we adopt the definition of a public-private partnership provided by Esteve and Ysa [1] and, therefore, we understand PPPs as arrangements “in which public organizations transfer to private firms the risk and responsibility for realizing public service delivery” [9] (p. 609). The literature has identified many benefits associated with PPPs. In general, it is believed that these collaborative arrangements bring advantages to both the public and the private sectors [29], such as sharing the risks and financial costs of projects, enabling innovation and improving public service delivery [1,8,29]. However, previous research has also stressed the many challenges of establishing and implementing PPPs and PPP-related projects. Van den Hurk [30], for example, acknowledges the complex nature of PPPs and states that PPPs require major efforts in terms of preparation, procurement, managing and operation, leading to high transaction costs. PPPs also involve high financing and demanding negotiations [31,32]. With the increased use of PPPs, the issue of transparency has also become an important challenge recently addressed in literature [9].

Previous studies on PPPs have differentiated between internal and external transparency. Reynaers and Grimmelikhuijsen [9] refer to internal transparency as “the availability (visibility and inferability) of information to public procurers about the technical and financial project parameters and service-level expectations” (p. 612). According to the authors, promotion of internal transparency consists of a bi-directional process where the public partner clarifies expectations to the private partner and the private partner provides insight on its performance to the public partner, which allows the latter to ensure that the

former is competent and acting in the public interest. Given that often public and private interests may diverge [1], the alignment between private and public interests is particularly important for public-private partnerships to be successful. Further, internal transparency is essential to engender trust among the partners [33], which results in improved performance and collaboration in PPPs [34,35].

External transparency has to do with “the extent to which an entity reveals to external stakeholders’ relevant information about its own decision processes, procedures, functioning and performance” [9] (p. 611). External transparency is therefore closely related to the concepts of public accountability and scrutiny [33], which assume that public authorities should be accountable for the way they use their mandates and spend public money [36]. In general, most scholars have suggested that the level of external transparency in PPPs is low [9]) but they have offered only limited explanations to understand why. Reynaers [37], for example, suggests that supervisory roles being shirked and the non-involvement of public officials results in lower transparency. Similarly, Shaoul et al. [38] and Hodge and Greve [39] state that PPPs have provided only a limited opportunity for meaningful levels of transparency due to the complex financial arrangements involved in such partnerships. Additional studies have also addressed the tensions between efficiency and openness, the challenge of multiple accountabilities and the confidentiality requests made by private partners [5–8].

In general, the literature on transparency in PPPs has addressed either internal transparency or external transparency but has largely ignored the relationship between these distinctive types of transparency. Only a few studies have assumed that, although it is possible to achieve external transparency without internal transparency, internal transparency may lead to external transparency [9]. For example, internal transparency may contribute to building a culture of both financial and non-financial disclosure and information sharing that may extend beyond the partnership. In addition, if the public partner lacks information about the private partner (for example, about its performance), it will be difficult to make the functioning of the PPP transparent to the public. Moreover, this literature has conceptualized transparency mainly as availability of information, without acknowledging that availability is a necessary but not sufficient condition for transparency. This is particularly important in the case of external transparency, given that the complexities of PPPs may hinder the understanding of the disclosed information by the public.

It is therefore legitimate to say that the study of internal and external transparency in PPPs needs further exploration. Our study aims to investigate this topic by answering the following two research questions—(1) What determines internal and external transparency in PPPs? and (2) To what extent does internal transparency contribute to external transparency?

### 3. Methodology and Sample

In order to answer our research questions, we adopted the interpretative case study [40]. Our epistemological approach is motivated by our belief that it is difficult to understand reality in a purely objective way. We argue that individuals make sense of their environments by relying on their context. In practice, interpretive researchers view individuals’ social reality as being embedded within and impossible to abstract from their social settings; they interpret reality through a sense-making process rather than a hypothesis-testing process [41]. Thus, we aimed at collecting as much evidence as possible to capture the multiple realities that co-existed in the case as well as at understanding the diverse perspectives and meanings of the different actors involved. Moreover, the complexity and subjectivity of the topic, the absence of previous empirical research and the nature of the research questions also supported our choice of approach and methodology [42,43].

Unlike positivist quantitative researchers, who make generalizability a crucial criterion to evaluate the rigor of quantitative studies, interpretative qualitative scholars focus on providing in-depth explanations and meanings rather than generalizing findings. Yet we argue that our study is generalizable to a certain extent. On the one hand, according to Yin [44],

often, generalization in qualitative research relies on the descriptive representativeness of the sample (or set of participants or settings on which data are actually collected), in terms of the distribution of properties of individuals or groups, for the larger population to which the researcher wants to generalize. As we will discuss below, our sample of interviewees is representative of the type of actors involved in the case study. On the other hand, we also argue that, although our emphasis is not on the generalizability of the findings or interpretations, our study is transferable to new situations and contexts. In sum, our research allows for the implementation of two of the three research strategies of generalization in qualitative research (empirical generalization and case-to-case transfer) [45]. Public-private collaborations can occur through different organizational forms. One useful framework for exploring the nature of PPPs is the one adopted by the Commission of the European Communities (CEC) (2004) to understand PPP arrangements used by member states for the delivery of public services. The CEC distinguishes two main options to articulate these collaborations. In the first one, contractual public-private partnerships, the public sector establishes a contract with the private sector to develop certain responsibilities related to the implementation of a particular policy. In the second one, institutional public-private partnerships, both parties collaborate by creating a new organization that will be jointly governed. In contractual PPPs, the relation between the public and the private sector is based solely on a contract. Hence, it resembles a classic principal-agent setting, in which the public sector determines what the private partner has to do. Instead, in institutional PPPs, the relation between the partners is much more active, as both parties jointly govern the new venture [1]. We therefore argue that institutional PPPs better allow us to explore the management of the collaborative venture. Hence, the case study that we have analyzed is an example of an institutional PPP. The selected case study is the water supply service to towns in the Metropolitan Area of Barcelona (AMB). It is an institutional public-private initiative owned by two private actors (the General Water Company of Barcelona and Criteria Caixa) and a public one (the Metropolitan Area of Barcelona).

Our study took place between 2018 and 2020. Most of our empirical evidence was collected via in-depth interviews. To that end, we set up 38 interviews with stakeholders linked to the specific case study. This provided a purposive, theoretically driven sample [44,46] that is suitable for gaining a better understanding of the role of transparency in public-private sector collaborations for water supply. However, it should be noted that while a single case study can help us to understand the theoretical mechanisms of a particular phenomenon, it does not allow us to generalize our findings to other contexts. In addition, it should also be noted that the current methodological approach, while it can be very useful to comprehend a phenomenon, it is not suitable for drawing causal inferences [47].

In an initial phase prior to field development, we developed five pilot interviews with professional specialists in the field of water management. These interviews proved very useful in validating the proposed protocol, drawing up the list of people who should be interviewed and making a detailed analysis of the opinions and views about the area of study (see the Supplementary Materials for a list of the interview questions).

The 38 interviews took place in person or virtually to accommodate the needs of the interviewees. With the sample of interviewees chosen, the aim was to gather the opinions, thoughts and perceptions of the various interest groups linked with the case study. In this respect, it is worth underlining that one of the main objectives of this qualitative study was to interview a sample that was as representative as possible of those involved in this subject area, in order to obtain the broadest possible overview of all the feelings, attitudes and frames of reference of the interest groups. These groups fell into five broad categories: associations and consumer platforms, public authorities, private companies, academics or experts and media. Each interview was transcribed and coded independently by two researchers. We used a mixed inductive-deductive strategy to map emerging codes into existing concepts from the literature on transparency in general and transparency in PPPs in particular, with grounded codes emerging from the stories told by interviewees. The researchers met regularly to compare the transcript process and discuss the meaning of

those sentences that were deemed to be important for the case or to clarify meanings of particular expressions. When something was unclear, the researchers contacted the interviewees again to make sure that they were representing the original meaning given by the person interviewed. Hence, the coding process was iterative and collaborative, with the ultimate goal of representing the different views and opinions expressed by each interviewee and to make sense of their perspectives. To ensure the privacy of the actors who participated in this study, the reported quotations are anonymous and only include some general information about the profile of the respondent.

#### 4. Case Study

In Spain, access to water is a guaranteed right by law and groundwater is classified as public property. Therefore, the responsibility for water supply and its mandatory provision as a public service to citizens is attributed to local governments [44].

The current public debate on water management questions the different types of management of public services and the benefits and limits of public-private partnerships. It is a public debate that has acquired special strength in the case of the water supply service in recent times, generating intense controversies on political agendas and high levels of prominence in the media.

##### 4.1. The Debate on Remunicipalization

Many cities in the world are increasingly opting for the so-called remunicipalization of public services, gaining direct control back over the management of water supply and sanitation. In many cases, the trend to return to direct public management is proposed as a response to the failure of private operators to prioritize the needs of communities over their economic benefits. The growing phenomenon of remunicipalization of water services is conceived as an emerging global trend; during the last two decades, specifically from 2000 to 2015, there have been at least 180 cases of water remunicipalization in 35 countries, both in the North and the South of the world, with some notable cases such as Berlin and Paris [48].

The argument for remunicipalization, which is also found in the case of Barcelona, is based on the need for the public management of water, given that is a fundamental resource for life. According to this approach, public management of water would lead to increased public value—for citizens [49].

##### 4.2. Management of the Water Service in the Metropolitan Area of Barcelona

Historically, the water management model has been indirect in Barcelona since 1867, both in supply and in distribution. The presence of several competing private companies in the urban area was the driving force behind the development of a modern drinking water system in the city of Barcelona [50].

The public-private company Aigües de Barcelona—Empresa Metropolitana de Gestió del Cicle Integral de l'Aigua, SA, was created in 2013 to manage the supply of water in the metropolitan area of Barcelona, offering the service to nearly three million people. It is a public-private initiative owned 70% by the General Water Company of Barcelona (Sociedad General de Aguas de Barcelona in Spanish—SGAB) (private partner), 15% by the Metropolitan Area of Barcelona (Area Metropolitana de Barcelona in Spanish—AMB) (public partner) and 15% by Criteria Caixa (private partner).

SGAB manages the integrated water cycle, going through all phases, from collection to purification, transportation, and distribution, as well as sanitation and treatment of wastewater for its return to the natural environment or reuse. According to the available published data, every day in Barcelona and the metropolitan area 530 million liters of drinking water are consumed. To respond to this basic need, Aigües de Barcelona is supplied with resources from surface sources (rivers and reservoirs), underground sources (aquifers and wells) and, to a lesser extent, marine sources.

#### 4.3. Current Debate and Judicialization of the Conflict

In recent years and especially throughout 2019, there has been a debate at political, social, economic and media fora regarding the water cycle and especially the provision of water supply and sanitation to populations. The current debate is also driven by the proposals and the positioning of the political parties, which during the electoral campaigns of the last local and general elections led to a greater confrontation between the defenders of direct and indirect management.

At the Catalan level, the three political parties with a majority in Barcelona City Council and therefore also in the AMB, have declared their political support, although at different ideological and pragmatic levels, for the direct management of water as a common good and human right, asking for a public consultation on the change of management and highlighting the importance of the active participation of citizens. In the political discourse, apart from the debate on remunicipalization, there is evidence of the need, from both the AMB and the Catalan Water Agency, for greater and more active regulation of water management to improve transparency [49].

### 5. Findings

Our findings show that there is a lack of external transparency: the decision-making process of the PPP is not transparent, and neither are the individual actions of the private partners, on one hand and the public partner, on the other. Although the predominant private partner has recently invested in communication campaigns, our interviewees perceive these campaigns as having a marketing goal instead of a transparency one. Thus, in general, other than the details of the water bill, there is little information disclosed to citizens and external stakeholders, which results in a lack of trust towards the PPP. Our results also show that internal transparency is no better and that the private partners are not providing the public partner with the information they need to perform their role as controllers. Our findings also indicate that there are three important determinants of this lack of internal transparency—(1) lack of trust among the partners, (2) low organizational capacity in the public partner to perform its role in the partnership and (3) different mindsets across partners. We argue that these factors contribute to an internal culture of low transparency that also influences the low level of external transparency.

#### 5.1. Level of Transparency in the PPP

##### 5.1.1. Lack of External Transparency

Our interviewees perceived a lack of information and communication about data that really matters to them, such as the per capita consumption in certain cities. This data is actually public and should be available. One academic, for example, referred to the difficulty in accessing this type of information, which happens often in his research:

*"Some time ago, I was doing a piece of work on water consumption and trends in consumption in various Spanish cities and there were cities with a population of more than half a million for which it was impossible to obtain the consumption data, because they told me it entailed an invasion of the private domain but this isn't true because I only needed the aggregate consumption of the city, the cubic meters per year."*

In this respect, one of the representatives of platforms in favor of direct management of water services listed the main types of information to which they are denied access:

*"At an institutional level, there is no access to the minutes of board meetings; as for tariffs, we do not have a clear knowledge of the mechanisms and guarantees with respect to supply cuts, their procedures and criteria; in accounting, we are missing the remuneration of management staff; in the case of public works, investment plans and analysis of alternatives are unknowns; and in contracts and tenders, there is no access to proposals, composition, minutes and resolutions of contracting committees."*

Lack of transparency also refers to the actions of the public entity both in contracting processes and in the use made of tax and tariff collection, especially with regard to the

concession tax. The concession tax is the sum that public authorities charge to the private company for operating the service and its ultimate purpose is that it should be reinvested in maintenance and in investments linked with the service itself, which does not always occur in the case of water. Its importance was emphasized by a representative of an association in favor of direct management, who warned:

*“Financing is made easier through the concession tax but more seriously, this is a non-earmarked tax. The private party, the interested party, pays the tax in advance and now the town and city councils are using it indiscriminately and unilaterally; they can use it for whatever they like, whereas the contracts state that it should be used to finance the needs of the water services.”*

Our interviewees stressed the importance of this lack of transparency and stated that it has a negative effect on the functioning of the PPP. As one political representative observed:

*“The important thing and something that has long been overdue, is to make a great effort to improve transparency, promoting the comparability of production data, quality and prices in different councils and towns and cities in Spain . . . I believe that the mechanisms, the tools and the operations that have been set in motion have not been sufficiently transparent; in fact, a series of decision-making mechanisms were put forward and then when these companies or contracts were seen to be bringing the projects to a close, cases of abuse have been observed on the part of private entities, together with an abandonment of key responsibilities on the part of public entities.”*

According to several interviewees, investment in transparency campaigns is another of the problematic areas. Looking at this over time, some of those consulted declared that, as a private company, Agbar tended to communicate very little or nothing at all to citizens for many years, since it did not view this as necessary. This strategy of non-communication threw suspicion on the private operator and provided the supporters of direct management with arguments about the advisability of taking back the service control, since the operator was not being transparent and “hiding” from criticism. As one academic explained:

*“The bad thing about many companies like Agbar is that they preferred not to communicate, adhering to the broad principle of ‘the less said about us the better’ but there comes a time when this communication policy can turn against you when you are the target of communication attacks from the other party and you have to act, because it’s no good remaining silent.”*

As several of those consulted noted, having analyzed this situation, Agbar decided to radically change its strategy and embarked on some major communication campaigns, earmarking considerable media expenditure to reinforce the Aigües de Barcelona brand by projecting values of expertise associated with responsible water management. The public authorities did not take such a matter lightly given the high expenditure on communication (hard for the public sector to accept) as well as a lack of consensus about the campaign within the PPP. As one of our interviewees said: *“Communication has been appropriated to a certain extent, because it definitely has not been agreed on.”*

In this respect, there was an internal debate going on between the two PPP parties concerning the relevance of brand hierarchy in the establishment of the public-private venture. It is considered that Agbar has promoted the Aigües de Barcelona brand as its own, relegating Barcelona City Council to a totally secondary role, as a political representative commented:

*“If you look at a Barcelona refuse collection truck, you’ll see a clear hierarchy of brands in the logos on the truck; you’ll see the words Barcelona City Council, Ecology, Ciutat Neta (Clean City) and finally, at the bottom, FCC but if you look at water, you won’t find Abemcia (Aigües de Barcelona—Empresa Metropolitana del Cicle de l’Aigua), which is what the joint enterprise should be called and this image issue is very important. Agbar is confused with Aigües de Barcelona; recently I have seen advertising on the subject of the pandemic or discounted tariffs and you see Agbar, when in fact we were implementing a plan for these services agreed with the AMB, as one would expect . . . attempts are being*

*made to rectify all this with a new framework agreement which makes it clear that the public authorities have public control over communication in the budget."*

This being said, it is interesting to note that Agbar decided to address their criticized lack of transparency through a media campaign with a focus on the brand. However, branding strategies do not necessarily result in more transparency.

Many of the interviewees said that the water bill, over and above its purpose as a receipt, is Aigües de Barcelona's principal tool of transparency directed towards all its customers on a regular basis. Interviewees from the public partner explained that the Barcelona City Council has the power to establish the tariffs that appear on the bill received by customers every two months. As far as water consumption is concerned, this bill is structured in prices by sections, which penalize higher water consumption; this is a positive component, since it pursues fairness (those who consume more pay more). Also, it promotes water-saving habits. In addition, Agbar collects the service's fees through the Aigües de Barcelona bill.

There is a broad consensus among those consulted that this bill is complex and confusing due to the items that are charged. It is actually estimated that only about 30% of its cost is directly linked with the water management undertaken by Agbar. The remaining costs relate to a number of items that are included on the bill and which do not correspond directly to the consumption of water, such as the water tax (levied by the Catalan Water Agency of the Autonomous Government of Catalonia), the sewage system tax (Barcelona City Council) and the metropolitan waste treatment tax, a new tax also levied by Barcelona City Council which has appeared recently (as of September 2020).

Thus the bill does not communicate the real costs of water consumption accurately: "We have a complex regulatory framework in which citizens pay the AMB part of the real cost of the service and part of the refuse collection service, the tax, another tax, VAT and in the end you have the private company providing a payment collection service that undermines its work, because people say, 'you charge a lot,' when in fact the charge for the actual cost of providing the service is small." "Why isn't collecting the rubbish and the recycling tax charged through the *Impuesto Sobre Bienes e Inmuebles* (property tax) instead of the water? I think it's a situation that suits the City Council, because in many places they know that if they want to charge these taxes, they will pick up 60% of them and the remaining 40% will be unpaid; on the other hand, if they charge via the water bill, they will collect 100%."

In relation to the bill, Agbar has actually tried to be proactive in terms of transparency, as some interviewees noted, making considerable efforts to help users understand the bill, through communication and other initiatives that pay particular attention to the details of the bill.: "*Agbar has done many things to improve the service, it has broken down the bill and it has even gone round districts explaining the bill so that people will understand it.*"

In the opinion of most of those interviewed, these efforts to explain the bill should be made by the local authority itself, since it is the one responsible for the added taxes unrelated to water management. In the words of one representative of a civic association:

*"If you pick up a bill, the item of least importance is the cost of the water, because all you see are misplaced add-ons that the local authority has pushed to be included; this has happened in Barcelona, for example, with the refuse collection and recycling charges and so in terms of information what you're paying for is being devalued. This is why I think the explanation and itemization is something the local authority itself should do, for the sake of transparency."*

This situation leads to a general perception that the water service is expensive. This high price is one of the arguments used by supporters of direct management to legitimize the idea that Agbar reaps handsome profits through this bill. According to interviewees and academics, the company has actual industrial profit of approximately 6%, which is within the usual margins for the sector:

*"Messages and declarations are sent out about the industrial profit that do not reflect the real situation. Transparency is very high in this case, the record says it all, everything and these are not industrial margins characteristic of drug or arms trafficking as some people would have you believe."*

In the opinion of one think tank member, this is a perverse game of communication, in which damage is done to the company's image:

*"The company is limited by the regulations in many aspects, for example, in the bill it issues; I don't understand it, it's not easy to read and I believe it is deliberately presented in this way by the regulator, who has an interest in charging taxes like the refuse collection taxes and in people continuing to think that water is very expensive." "Agbar has two problems with the bill: first, it has the laborious task of receiving payment and distributing taxes and secondly and more seriously, its image is damaged because people end up thinking what they hear in misinformed conversations, that water is very expensive; this is a very clear example of communication confusion." "On the water bill, the least important cost is the water, because there are too many misplaced items and users do not understand this. Furthermore, the public authorities often incentivize the inclusion of more taxes, as occurred recently with recycling. The end result of all this is that what you're paying for is unclear."*

#### 5.1.2. Lack of Internal Transparency

As our interviewees stated, setting tariffs is one of the main responsibilities of public authorities, in this case, the AMB. To do so, public authorities need to breakdown all items linked to both invoiced revenue and expenditure on investment, maintenance, staff and so forth. It is at this point that representatives of public authorities, in their role as controllers of the budget, prioritize transparency to hold the private partners accountable. For them, this is an important challenge:

*"If they wish to make an investment proposal, I have the last word, because in the end I have to approve it and I need much more information than the information they are giving me; I don't have access to the raw material of the information and in reality, this is a filter that the company is applying."*

Furthermore, persons in charge at the AMB point to the existence of highly debatable items on these balance sheets which are difficult to justify:

*"There are some items, such as communication and R&D&I, that form part of the tariff but we tell them that these items do not form part of the risk and responsibility of the service and right now we're in the heat of negotiation, because we believe they are deliberately added items and expenses that are unrelated to the PPP."*

One example is the amount of money that public authorities pay the private company as "know-how." One interviewee said:

*"Another matter of concern is that there is an amount of money to be paid to them for what they call know-how, which is the knowledge they have and which they contributed when creating the joint enterprise."*

Moreover, there is the feeling among public authorities that this "know-how" should be theirs rather than private companies:

*"Know-how is a controversial topic, because it means getting involved in what they call business confidentiality but if the service is public, this has to be official information and the ownership of know-how that is generated technically, administratively, etc., is the property of the owner of the service, because we're talking about a concession that has to revert to the owner of the service." "Being able to make a good analysis of the tariff is fundamental, because the tariff reflects everything that is being done, what we want, what we don't want . . . for example, part of the tariff is assigned to energy poverty but I have been unable to find out which part that is."*

## 5.2. Determinants of Lack of Transparency

### 5.2.1. Lack of Trust

According to our interviewees, the private partners are reluctant to share more information, given their lack of trust in the public partner. This issue particularly impacts the accountability of investments and expenditure incurred and of industrial profits obtained by the private partner. Lack of trust among partners results in suspicion when sharing or clarifying information particularly linked to the economic management of the service:

*"Trust has an additional element; when there is trust and you see something you don't understand in the other person's behavior, you don't immediately harbor suspicions; you give them some leeway to clarify the situation but in this case, there is no trust."*

*"Preceding lack of transparency is lack of trust, which is fundamental to sharing a feeling that with cooperation, everyone wins."*

### 5.2.2. Low Organizational Capacity in the Public Partner to Perform Its Role in the Partnership

Organizational capacity is key because it may help determine the extent to which the local authority is able to develop and implement transparency within the PPP. In this respect, even those within public authorities recognize the low capacity of the public sector in terms of technical and human resources to fully implement its supervisory role, as several interviewees told us:

*"To some extent, citizens have gained a negative impression of the provision of services by the private sector when it has been seen, for example, that the investments have not been made due to lack of control and supervision by the public authorities, which must ensure that the PPP is effective."*

Another interviewee added: *"Many public authorities gave water concessions because they had no other option given their low level of resources."* Yet, over the years, local governments have increased their organizational capacity and have improved their ability to supervise and control the functioning of PPPs. This has also been the case of the water management partnership in Barcelona. At the same time, those consulted noticed that this change has not always been well received by private partners. In the words of one of the interviewees:

*"In the last few years, political forces have arrived in the town and city councils that want public authorities to exercise greater control and supervision of the service but the public authorities do not have many technical skills in this area and that is always a distorting element."*

### 5.2.3. Different Mindsets across Partners

Our interviewees acknowledged the different ideological frameworks of the PPP partners. On one hand, public authorities, clearly support direct management of public services. One academic explained:

*"When you enter Barcelona City Council (to govern) with the conviction or with the symbolic representation, that you are incompatible with a private company providing this service, communication deteriorates ... to avoid this, the idea would be for the two parties to express their point of view and think along the lines of mutual benefit; it is very important that internal communication should be based on trust."*

As a result, public authorities believe that their role is to be the regulator and guarantor of the service. The traditional tense relationship with the private sector does not make it easy to fulfil this role:

*"In the past, there has been a lack of commitment by public authorities, which has resulted in a perception of them taking the lead role and acting as if they were lord and master of everything but things cannot continue like this and I think they know it."*

In the same vein, another interviewee stated:

*"Now there is a process in which public authorities want to show ownership and therefore this is a weakness that we drag from the past and this is why we continue to have the perception that they are going their own sweet way."*

Thus, as an expert observed, supporting direct management of public service provision is a core principle for the municipal government, although currently this support is not as intense as it previously was:

*"Within the parties in power in the City Council there has always been certain hostility and an attitude of mistrust towards companies. My feeling is that, now, they have considerably moderated their discourse and they prefer to leave things as they were, because there's no simple alternative for improvement that does not involve too much effort or investment. The City Council is working on many fronts and this one isn't asking for food, it doesn't result in any conflict and as long as it's working, then we'll see but there isn't a framework of trust."*

### 5.3. Enhancing Transparency: The Importance of Rhetoric

The way in which the PPP communicates with citizens is a key element in the provision of services for the majority of our interviewees, who believed it is particularly important in the evaluation of the service. This is borne out by the words of several interviewees. For instance, one mentioned that: *"In the most sustainable use of the resource, communication is essential."* In the same vein, another one said: *"I have always been quite certain that communication is essential for a public service, independently of who owns the management model."* And a third interviewee added:

*"It is fundamental for the service that I, as the regulator, should decide whether it is appropriate to launch a campaign for paperless billing and I want to appear with Agbar, count on their support but I also want us to make the decisions, not for them to communicate whatever they want and to do so without mentioning us."*

In general, most of the interviewees acknowledged a change of paradigm from considering citizens "users," "customers" or "subscribers," that is, passive recipients of the service, to recognizing their role as active participants in the water management process. For them, this meant a shift from unilaterally communicating with citizens about branding and water saving strategies to informing them about the full management cycle of the service, making it transparent. One interviewee observed:

*"In public-private communication, thought should be given to concepts and interests of the citizen and values for the citizen, not the customer or the user, because talking about a user has a hierarchical tone of 'I allow you to be a user' and that's over now." "Will we continue talking about customer service and customer quality service? No! This is not for the 21st century; now, we are citizens, we don't just want to receive a bill every two months, we need to understand things, the metropolitan reality of where we live, we need to understand the difficulties involved in the provision of a service, we need someone to explain the major challenges to us."*

Interestingly enough, the provision of the water service in Barcelona is positively assessed by all parties and under no circumstances problematic with reference to the continuity of the service and the quality of the water's taste. This said, taste has been often discussed since it varies considerably depending on the origin of the water (Ter-Llobregat vs Besòs):

*"People receive a quality service and there are very few incidents but in some areas an alternative language has been created, in which the company is presented as a kind of vulnerability that owns the water and all this happens because the company hasn't explained itself well enough, although now considerable efforts are being made to explain itself better."*

As a result, citizens' concerns mainly have to do with fairness, sustainability and efficiency, especially in relation to the organizational arrangement used to manage the provision of the service. For citizens, the main priority is the balance of both the service they receive and what they pay for it: *"The citizen is interested in participating in and knowing*

*about management but not in the arrangements of provision.*" Along the same lines, another interviewee stated: "My feeling is that the service works: people turn the tap on and water comes out and they don't have any problems with it."

According to the interviewees, informing, educating and raising awareness in order to have an impact on the behavior of citizens are essential goals to achieve transparency. Thus, transparency initiatives must not only make events or data available. Further, they have to result in a bilateral exchange of information between the PPP and the citizen. This is actually what giving the citizen an active role in the water management process means. As an expert noted:

*"Genuine communication, effective, genuine communication succeeds in creating a two-way flow of information, otherwise it can be confused with advertising. I would emphasize the two-way element, because communication also allows the communicator to become the receiver of the reaction of the receiver."*

Furthermore, for transparency to be successful, interviewees referred to the ability to adapt and customize the information to each particular interest group (citizens, media, etc.). This approach to transparency requires great effort and commitment but it has important positive consequences according to the interviewees, since it delivers the type of information each group is interested in and shows a focus on the citizen. In this respect, one expert in political and corporate communication explained:

*"To fight the argument that private partners cannot make a profit, what needs to be done is to communicate the benefits and the quality of the service, explain bills in detail, call the client every so often, personalize the way in which a problem is solved and get people to see they are being looked after, because in the end it is all about looking after citizens and ensuring they are happy."*

As an example of how service benefits should be explained, one of the interviewees highlighted the importance of local stakeholders:

*"Right across Spain, we organize meetings with journalists and particularly with environmental journalists, since we are dealing with water and we take them to treatment plants and reservoirs, we explain how the tanks work, like we do when schools visit these infrastructures, because we believe the didactic and communicative function of the media is fundamental. Through the platform of neighborhood associations, we have implemented energy poverty programs in neighborhoods like Ciutat Meridiana and Vallbona and we have made door-to-door calls on more than 5000 homes in two years to explain the program and the neighbors' reaction has been fantastic, because people have felt protected when they see there are resources to help them."*

In sum, our findings show the importance of transparency in public services and in PPPs in particular. Moreover, lack of trust, difficulties in supervising and controlling the other partner and the different mindsets of each party involved add serious challenges for moving from availability of information to transparency.

## 6. Conclusions

This study offers significant contributions to the scholarly understanding of transparency in PPPs and transparency. First, by presenting empirical evidence from a case study on Barcelona's water provision, it contributes to bettering our understanding of transparency in PPPs that goes beyond the mandatory financial disclosures to which PPPs are bound to.

Second, our study confirms that a comprehensive approach to the study of transparency in PPPs needs to consider both internal (among partners) and external transparency (towards citizens and other stakeholders). In this respect, our results show that there is a lack of transparency, both internal and external, which is consistent with the findings of previous studies [9]. Further, our results show that the lack of internal transparency is determined by a lack of trust among partners, insufficient organizational capacity in the public partner to supervise and control the activities developed by the private partners

and the different mindsets of the public and the private partners. The latter is particularly relevant because it confirms findings from previous studies that show that the differences among public and private actors are a major cause of challenges in PPPs [1,35]. Taken together, the determinants of internal transparency result in a culture of low transparency within the partnership that also influences the low external transparency: the different partners do not feel obliged to disclose information that goes beyond the mandatory financial disclosures and, as a consequence, they do not make the joint decision-making processes transparent either.

Third, our study shows that the availability of information is a necessary but not a sufficient condition, to achieve transparency, particularly in the context of PPPs. The information needs to be understood and assessed by the audiences of the PPP, mainly the citizens and additional stakeholders. It therefore needs to include a variety of elements including information usability, comprehensibility, quality and fitness for use. Acknowledging the difference between information availability and transparency has actually important practical implications and provides some insights to participants in private-public partnerships with a view to increasing transparency, both internal and external, such as a focus on rhetoric and stressing elements of fairness, sustainability and efficiency of the public service.

Finally, our research is not without limitations. First, it studies only one public service: the provision of water. Future studies would do well to expand the service scope of inquiry, also including what have been described as complex public services [51]. Moreover, we provide a single case study in the city of Barcelona. Yet, our research design is transferable to new situations and contexts. Hence, future comparative studies could be conducted to understand the role of contextual factors in making PPPs more transparent, both internally and externally. Lastly, our study has not taken into account the perspective of citizens (the users of the service). Further research could aim at conducting surveys specifically addressed at better understanding citizens' perceptions of transparency.

**Supplementary Materials:** The following are available online at <https://www.mdpi.com/2071-1050/13/4/1777/s1>.

**Author Contributions:** Conceptualization, M.R., M.G.-H. and M.E.; methodology, M.R., M.G.-H. and M.E.; investigation, M.R., M.G.-H. and M.E.; writing—original draft preparation, M.R., M.G.-H. and M.E.; writing—review and editing, M.R., M.G.-H. and M.E.; funding acquisition, M.R., M.G.-H. and M.E. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by the AGAUR 2017-SGR-1556 and the Ministerio de Economía y Competitividad, Grant/Award Number: CSO2016-80823-P.

**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Ethics Committee of ESADE Business School.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Esteve, M.; Ysa, T. Institutional public-private partnerships: Mixing oil and water. In Proceedings of the 2010 IRSPM Conference, Berne, Switzerland, 7–9 April 2010.
- Gil-Garcia, R.; Gasco-Hernandez, M.; Pardo, T. Beyond transparency, participation, and collaboration? A reflection on the dimensions of open government. *Public Perform. Manag. Rev.* **2020**, *43*, 483–502. [[CrossRef](#)]
- Greve, C.; Hodge, G. Transparency in public-private partnerships: Some lessons from Scandinavia and Australia. In Proceedings of the 1st Global Conference on Transparency Research, Newark, NJ, USA, 1–20 May 2011.
- Shukla, S. *A Framework for Disclosure in Public-Private Partnerships*; World Bank Group—Constructions Sector Transparency Initiative—Enabling Infrastructure Investment: Washington, DC, USA, 2015.
- Spicer, Z. Bridging the accountability and transparency gap in inter-municipal collaboration. *Local Gov. Stud.* **2017**, *43*, 388–407. [[CrossRef](#)]

6. Willems, T. Democratic accountability in public–private partnerships: The curious case of Flemish school infrastructure. *Public Adm.* **2014**, *92*, 340–358. [[CrossRef](#)]
7. Hood, J.; Fraser, I.; McGarvey, N. Transparency of risk and reward in UK public-private partnerships. *Public Budg. Financ.* **2006**, *26*, 40–58. [[CrossRef](#)]
8. Bloomfield, P. The challenging business of long-term public-private partnerships: Reflections on local experience. *Public Adm. Rev.* **2006**, *66*, 400–411. [[CrossRef](#)]
9. Reynaers, A.-M.; Grimmelikhuijsen, S. Transparency in public-private partnerships: Not so bad after all? *Public Adm.* **2015**, *93*, 609–626. [[CrossRef](#)]
10. Reich, M.R. The core roles of transparency and accountability in the governance of global health public-private partnerships. *Health Syst. Reform* **2018**, *4*, 239–248. [[CrossRef](#)]
11. Lourenço, R.P. An analysis of open government portals: A perspective of transparency for accountability. *Gov. Inf. Q.* **2015**, *32*, 323–332. [[CrossRef](#)]
12. Sandoval-Almazan, R. The two door perspective: An assessment framework for open government. *J. E-Democr. Open Gov.* **2011**, *3*, 166–181.
13. Cucciniello, M.; Porumbescu, G.; Grimmelikhuijsen, S. 25 years of transparency Research: Evidence and future directions. *Public Adm. Rev.* **2016**, *77*, 32–44. [[CrossRef](#)]
14. Meijer, A. Understanding the complex dynamics of transparency. *Public Adm. Rev.* **2013**, *73*, 429–439. [[CrossRef](#)]
15. Matheus, R.; Janssen, M. A systematic literature study to unravel transparency enabled by open government data: The window theory. *Public Perform. Manag. Rev.* **2020**, *43*, 503–534. [[CrossRef](#)]
16. Douglas, S.; Meijer, A. Transparency and public value—Analyzing the transparency practices and value creation of public utilities. *Int. J. Public Adm.* **2016**, *39*, 940–951. [[CrossRef](#)]
17. Curtin, D.; Mendes, J. Transparencies et participation: Des principes démocratiques pour l’administration de l’Union Européenne. *Rev. Française d’Administration Publique* **2011**, *137–138*, 101–121. [[CrossRef](#)]
18. Hood, C. From FOI world to WikiLeaks world: A new chapter in the transparency story? *Governance* **2011**, *24*, 635–638. [[CrossRef](#)]
19. Hazell, R.; Worthy, B. Assessing the performance of freedom of information. *Gov. Inf. Q.* **2010**, *27*, 352–359. [[CrossRef](#)]
20. Jaeger, P.T.; Bertot, J.C. Transparency and technological change: Ensuring equal and sustained public access to government information. *Gov. Inf. Q.* **2010**, *27*, 371–376. [[CrossRef](#)]
21. Roelof, P. Transparency and mistrust: Who or what should be made transparent? *Governance* **2019**, *32*, 565–580. [[CrossRef](#)]
22. Porumbescu, G.; Gil-Garcia, R.; Cucciniello, M. Can open Government increase citizen Engagement in co-production of health services? In Proceedings of the IIAS Study Group on Co-Production of Public Services Meeting, Washington, DC, USA, 6–7 June 2017.
23. Janssen, K. Open government data and the right to information: Opportunities and obstacles. *J. Community Inform.* **2012**, *8*. [[CrossRef](#)]
24. Dawes, S.S. Stewardship and usefulness: Policy principles for information-based transparency. *Gov. Inf. Q.* **2010**, *27*, 377–383. [[CrossRef](#)]
25. Zuiderwijk, A.; Gasco-Hernandez, M.; Parycek, P.; Janssen, M. Special issue on transparency and open data policies: Guest editors’ introduction. *J. Theor. Appl. Electron. Commer. Res.* **2014**, *9*, i–ix. [[CrossRef](#)]
26. Ruijer, H.J.M. *Proactive Transparency and Government Communication in the USA and the Netherlands*; Virginia Commonwealth University: Richmond, VA, USA, 2013.
27. Alenezi, H.; Tarhini, A.; Sharma, S.K. Development of quantitative model to investigate the strategic relationship between information quality and e-government benefits. *Transform. Gov. People Process Policy* **2015**, *9*, 324–351.
28. Armstrong, C.L. Providing a clearer view: An examination of transparency on local government websites. *Gov. Inf. Q.* **2011**, *28*, 11–16. [[CrossRef](#)]
29. Hodge, G.A.; Greve, C. Public–private partnerships: An international performance review. *Public Adm. Rev.* **2007**, *67*, 545–558. [[CrossRef](#)]
30. Van den Hurk, M. Public–private partnerships: Where do we go from here? A Belgian perspective. *Public Works Manag. Policy* **2018**, *23*, 274–294.
31. Van den Hurk, M.; Verhoest, K. The challenge of using standard contracts in public–private partnerships. *Public Manag. Rev.* **2016**, *18*, 278–299. [[CrossRef](#)]
32. Yescombe, E.R. *Public-Private Partnerships: Principles of Policy and Finance*; Butterworth-Heinemann: Burlington, MA, USA, 2007.
33. Forrer, J.; Kee, J.E.; Newcomer, K.E.; Boyer, E. Public–private partnerships and the public accountability question. *Public Adm. Rev.* **2010**, *70*, 475–484. [[CrossRef](#)]
34. Warsen, R.; Nederhand, J.; Klijn, E.H.; Grotenberg, S.; Koppenjan, J. What makes public–private partnerships work? Survey research into the outcomes and the quality of cooperation in PPPs. *Public Manag. Rev.* **2018**, *20*, 1165–1185. [[CrossRef](#)]
35. Saz-Carranza, A.; Serra, A. Institutional sources of distrust in government contracting. *Public Manag. Rev.* **2009**, *11*, 263–279. [[CrossRef](#)]
36. Bovens, M.; Schillemans, T.; Hart, P. Does public accountability work? An assessment tool. *Public Adm.* **2008**, *86*, 225–242. [[CrossRef](#)]
37. Reynaers, A.-M. Public values in public–private partnerships. *Public Adm. Rev.* **2013**, *74*, 41–50. [[CrossRef](#)]

38. Shaoul, J.; Stafford, A.; Stapleton, P. Accountability and corporate governance of public private partnerships. *Crit. Perspect. Account.* **2012**, *23*, 213–229. [[CrossRef](#)]
39. Hodge, G.A.; Greve, C. The challenge of public-private partnerships. In *Learning from International Experience*; Edward Elgar: Northampton, MA, USA, 2005.
40. Rubin, H.J.; Rubin, I. *Qualitative Interviewing the Art of Hearing Data*; Sage: Thousand Oaks, CA, USA, 2005.
41. Hirsch, E.D. *Validity in Interpretation*; Yale University Press: New Haven, CT, USA, 1967.
42. Agranoff, R.; Radin, B.A. The comparative case study approach in public administration. *Res. Public Adm.* **1991**, *1*, 203–221.
43. Marshall, C.; Rossman, G.B. *Designing Qualitative Research*; Sage: Thousand Oaks, CA, USA, 1995.
44. Yin, R.K. *Case Study Research. Design and Method*, 5th ed.; Sage: London, UK, 2013.
45. Maxwell, J.A.; Chmiel, M. Generalization in and from qualitative analysis. In *The SAGE handbook of Qualitative Data Analysis*; Flick, U., Ed.; Sage Publications: London, UK, 2014; pp. 540–553.
46. Miles, M.B.; Huberman, A.M. *Qualitative Data Analysis an Expanded Sourcebook*; Sage: Thousand Oaks, CA, USA, 1994.
47. Brady, H.E.; Collier, D. *Rethinking Social Inquiry*; Rowman & Littlefield: Laham, MD, USA, 2004.
48. Kishimoto, S.; Lobina, E.; Petitjean, O. *Llegó Para Quedarse: La Remunicipalización del Agua Como Tendencia Global*; PSIRU: London, UK, 2014.
49. March, H.; Grau-Satorras, M.; Saurí, D.; Swyngedouw, E. The deadlock of metropolitan remunicipalisation of water services management in Barcelona. *Water Altern.* **2019**, *12*, 360–379.
50. Matés Barco, J.M. *Evolución y Cambio en el Abastecimiento Urbano: Del sistema clásico al moderno*; Revista de Estudios Historico Jurídicos; Ediciones universitarias de Valparaíso: Valparaíso, Chile, 1999.
51. Brown, T.L.; Potoski, M.; Van Slyke, D.M. *Complex Contracting*; Cambridge University Press: London, UK, 2013.