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European experience of PPPs in the water supply sector: a critical evaluation

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ABSTRACT

Public–private partnerships (PPPs) are the most common form of water privatization and many European countries have gained great experience in implementing water privatization projects through partnerships. In the present paper, we provide an overview of PPPs in the water supply sector, the various models applied and an evaluation of their implementation in the European Union countries. The study explores four recent European case studies that illustrate the outcome of this policy reform. The evidence indicates that, although PPPs were launched as a pioneering and promising tool in the European region, the experience from their implementation did not live up to the expectations and many countries have turned to the reverse trend, namely the remunicipalization of water services. This review is not intended to provide a detailed analysis of the theory and practice of PPPs in the water service sector, but to offer a critical assessment of their adoption in the European region.

Keywords: Water privatization; Public-Private Partnerships; European countries

1. Introduction

Over the last three decades, in the context of neoliberal economic reforms for public sector shrinkage, the water supply services have also been targeted. Countries have used two methods to transfer water service provision from the public to private providers, namely full privatization and Public–Private Partnerships (PPPs). PPPs are the most frequently used type of privatization in water services and its proponents invoke cost-efficiency criteria, the extension of service coverage, stimulation of investment and relief of governments from budget deficits.

The first attempt to privatize water supply services in the European region through PPPs was in France. Since then, the European Commission has supported the implementation of PPPs in the water sector through the provision of grants from the Cohesion and Structural Funds as well as ISPA (Instrument for Structural Policies for Pre-Accession) [1].

However, the experience from their implementation in many European cities has given rise to numerous concerns; for instance, increases in water prices (tariffs), degradation of water quality, increases in water supply leakage due to underinvestment, restrictions in water access, corruption phenomena and increased financial burden on the state budget [2]. These results acted as a pressure lever to the state and led to the remunicipalization of water companies, that is the transfer of water services from private companies back to municipal authorities.

This paper aims to explore the rationale for implementing PPPs in the water sector, provide an overview of the different PPPs models and the way they are applied in the European Union countries and evaluate their implementation. In the analysis, the focus is laid on four case studies, namely France, Germany, Romania and Slovakia; these cases are considered by the European Commission as successful paradigms that other countries should follow [1].

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The main objectives are to understand the countries' relevant legislation, to explore their attitude towards privatization, to identify the external and internal forces that led to the implementation of PPPs and, finally, to illustrate the consequences of this policy reform. This paper is supplementary to previous researches, which emphasized more on the results of privatization and the remunicipalization of water services.

The remainder of the paper is structured as follows. Section 2 provides the justification of using PPPs in the water service sector and Section 3 shows their implementation. Section 4 presents four European case studies that adopted PPPs in water provision. The study concludes with a critical assessment of PPPs in the water sector in Europe. Finally, Section 5 summarizes the conclusions.

2. Justification of water privatization through PPPs in the EU

Since the early 1980s, the interest in water privatization through PPPs in the European region has increased dramatically. A number of arguments have been raised to justify the transfer of water service provision from public to private entities. Especially in the water supply sector, PPPs is the form of privatization preferred by governments and institutions, due to the beneficial position of the state in the contract [3]. This cooperation is supposed to modernize government operations and allow communication between the market and the state. Apart from the political perspective of neoliberalism which imposes the implication of all forms of privatization, the justification for the PPPs implementation lays upon the delivery of efficient services at low cost [4], as well as the improvement of quality and quantity of basic infrastructure [3].

At a microeconomic level, potential benefits may include the transparent and effective operation of private companies, due to their expertise in the operational sector and the use of financial and non-financial key performance indicators, which allow them to compare their performance with other private and public enterprises [5]. Indeed, partnering could be considered as a particularly valuable method of leveraging technical or management expertise and promoting technology transfer [6]. At a macroeconomic level, privatization is proposed as a way to enhance the welfare of a country, through the introduction of competition into the public-sector companies [4] and the transfer of financial costs and risks from the public to the private sector. Among the potential benefits, the reduction of government expenditures should not be neglected. Additionally, the PPP policy renders the state more attractive for international capital inflows by foreign investors and gives it a significant advantage in comparison with other countries in the global market [3].

Apart from the economic impact of PPPs, the EU and international organizations have reinforced and directed – especially, indebted – countries to privatize their public assets through PPPs [7]. More specifically, from 2007 to 2013, the European Investment Bank offered loans, at the lowest possible rate, for the implementation of projects through PPPs [8]. Also, the Instrument for Structural Policy for Pre-Accession (ISPA) has funded environmental infrastructure projects through PPPs and has provided technical assistance to

candidate countries of the EU for their implementation, from 2001 until today [1]. Furthermore, the EU obliged the in-debt member countries to enhance PPPs, through the Economic Adjustment Programs [2]. Lastly, according to Hall [7], many other institutions and donors like the World Economic Forum, the G20, the IFC and Organization for Economic Co-Operation and Development (OECD) had a significant role in promoting privatization through PPPs.

3. PPPs models in the water supply sector

Although the institutions and the neoliberal theory stand for the PPPs, the privatization of water and sanitation services is a difficult process to implement due to the complicated legislation framework. The main models of PPPs that emerged in water services are the following: (1) the management contracts, (2) the affermage model, (3) the lease model, (4) the joint venture, (5) the concession model and (6) the divestiture model [9]. Their implementation entails advantages and disadvantages, contract and risk differences. Specifically, the management contracts are the least challenging to implement. The governing body transfers the responsibility of a utility's management to a private operator for a short-term (3-5 years) and pays for the services a fixed fee, which, in many cases, can be amended depending on the operator's performance. The disadvantage of this model is that the intervention of the private operator in the improvement of performance is low, as there is a lack of important financial motives [9]. Both the affermage and lease models will be examined together, as the difference between them is limited to the operator's way of payment. In the affermage model, the fee varies depending on the tariffs and in the lease one, the payment is predetermined in the contract [9]. These models are risky, as the governing body is responsible for financing investment in infrastructure, but the operator is responsible for the design and management of the project. Additionally, they are more difficult to implement than the management contracts [9]. The joint venture is another model, according to which, the governing body desires a limited involvement of the private investor. In this case, the contract determines who will manage and control the project; in this sense, the risks, advantages and disadvantages of the projects are based on the governing body's negotiating ability [10]. The concession and divestiture are also two PPPs models with one difference. In both models, the operator has the full responsibility for the management, operation, maintenance, financing and investment control of the project. However, in the concession model, the control and the ownership are returned to the governing body after the contract ends (which lasts, at least, 25 years). In the divestiture model, on the other hand, the ownership remains to the private operator [3]. Both models involve many risks, which depend on the reliability of the private operator. Table 1 summarizes the key information of PPP models. However, the adoption of PPPs depends on the country's legal framework regarding the procedures, the requirements and the types of PPPs that can be agreed upon and applied. The proposal of a single process tailored to all countries is impossible.

Apart from the countries' national legislation, the international guidelines and treaties have an exceptional role

Table 1 Characteristics of PPP models

Model	Period	Payment	Responsibilities of public party	Responsibilities of private party	Involvement of private party
Management contract	3–5 years	Fixed fee amendable	Investment in infrastructure, maintenance	Management of water utilities	Low
Affermage	8–15 years	Fee depends on the tariffs	Investment in infrastructure	Maintenance and management	Medium
Lease	8–15 years	Fixed fee	Investment in infrastructure	Design of strategy and management	Medium
Joint venture	20–30 years	Depends on the contract	Depends on the contract	Depends on the contract	Medium-High
Concession	25+	Water tariffs	-	Management, opera- tion, maintenance, investment	High
Divestiture	Full privatization	Water tariffs	_	Management, operation, maintenance, investment	High

Sources: IPFA [3], PPIAF [9] and WBG [10].

in the configuration of PPPs. The EU institutions provide member states with technical assistance for the successful implementation of PPPs in water services and they simultaneously oblige them to transform their legislation accordingly [11]. The technical assistance provided by the EU institutions and the processes to be followed by the EU member states for PPPs are determined by the "Guidelines for successful Public-Private Partnership" published by the European Commission in 2003 [11]. According to these guidelines, the most appropriate PPPs for water infrastructure are the Build-Operate-Transfer (BOT) contract – where the private operator design, build and operate the project for certain period and the public party finances the project, the Design-Build-Finance-Operate (DBFO) concession - where the private partner finances the project and the project costs are recovered through public subsidies and the Concession - in which the expenses are covered from users charges [11]. Moreover, the European Commission's Guidelines [11] set as requirements a reasonable profit for both parties, legal regulatory structures and political support and stability. In addition, in 2004, the European Parliament and the Council published the Directive 2004/17/ EC, which coordinates the procurement procedures of entities operating in the water, energy, transport and postal sectors. This Directive has been repealed by the Directive 2014/25/EU, which promotes the free movement of goods and services, simplifies and digitalizes the procedures of public procurement, and makes them more flexible [12]. The above Directives define the procedures, the limitations and the advantages of PPPs in water services, whereas the quality of water supply is defined by the Drinking Water Directives [13-15].

To conclude with, the creation of a PPP is a complex and time-consuming process; its accomplishment entails several steps to be followed, the choice of the appropriate contract and participant requires deep knowledge and the legal framework can be a great obstacle to this procedure.

4. Recent European experience of PPPs in the water supply sector

The ideological background and the rise of neoliberal political parties, in the 1980s, were the main reasons that prompted some European countries to privatize their water service sectors [16]. In this study, the case studies of France and Germany have been chosen to be presented, since, for many years, they were considered as examples of PPPs success that other countries should follow. However, in both cases, water services were remunicipalized. The case studies of Romania and Slovakia represent cases of EU countries, with lower economic and political power, which adopted PPPs in the water services sector due to globalization and market trends. In both cases, the problems are obvious, but the power of the public is limited.

4.1. France

In France, the local public authorities are solely responsible for the provision of water services. More specifically, they are responsible for defining the general principles governing the service and selecting the operator – either private or public [17]. The most common models of water provision in France are the direct public management, the management contract, the lease and the concession [17]. Many French cities have privatized their water services for over 100 years (e.g., Ile de France, Lacs De L' Essonne, Nice, Rennes) [18], due to lack of public resources [19]. Moreover, the local public authorities have been able to differentiate the chosen PPP contract from those analyzed above, in order to meet their particular needs; hence, the contract types and

their conditions are vague. This freedom of municipalities to delegate water management to private operators is known as the "French Model" and the World Bank has impelled other countries to follow the French example for many years [20].

Many of the PPP contracts were not addressed by any national legislation, as the only relevant legislation, at that time, concerned water pollution (Water Act 1964, Law No 65-1245 of 1965). Due to lack of relevant legislation, all water contracts signed until 1982 were homogeneous as they followed an obligatory contract model that defined the duration, price provisions, etc. [17]. However, even after 1982, water contracts continued to be similar, particularly with regard to price provisions [17]. The first legislation, regarding water privatization, was created in 1986, with Law 86-912, which authorized the government to take various economic and social measures and regulated the procedures for the implementation of privatization – decided upon by Law no. 86-793 [21]. In the Statute of January 3, 1992, water protection, enhancement and development were included, in order to ensure that the requirements of public health, business and leisure activities are satisfied [22], while Law 93-122 of 1993 – known as the Sapin law, imposed the transparency of PPPs [19]. In 1995, the Barnier Law confined the duration of contracts to 20 years [19]. France's 1992 Statute was amended by Law 2004-332 of 2003, in order to comply with the Water Framework Directive 2000/60/CE [23].

The wave of nationalization of 1945, in France, did not affect water services. 80% of water provision remained delegated to private operators [24], and especially to three of them - Veolia, Suez and SAUR - which are the largest private water operators. The remunicipalization of water services began in 1997 from Durance-Luberon [25], while in 2010 the phenomenon accelerated after scandals about fraud, poor maintenance of pipelines and unaccountable increase of tariffs1 were published [24]. Until today, more than 94 municipalities have returned their water services to public [25] and 31% of water services are still managed by private operators [24]. Table 2 presents some of the French municipalities that privatized their water services along with the type of contract they signed, the water company involved, the duration of privatization, the current status and the reasons for remunicipalization. The massive remunicipalization of water services weakened the French water companies, which were about to be taken over by foreign investors and, hence, the French state proceeded to their partial nationalization² [26].

4.2. Germany

In Germany, the provision of water services is the responsibility of municipalities [27]. However, the public authorities, at the state and federal level, set the legal framework, which influences the general conditions of water services provision, for example, price, quality, abstraction and environmental measures. The most common forms of

privatization in Germany are the divestiture (formal privatization), the concession (material or functional privatization) and the joint venture (mixed form of privatization), also known as the "Berlin Model" [28]. The privatization is based on the "Law on privatization and reorganization of publicly owned assets" (Treuhandgesetz or Trusteeship Law, 1990), which intended to increase the performance of the state-owned enterprises [1,16].

As the municipalities are responsible for water provision, they also decide the type of water provider. There are many different types of providers, for example, special purpose associations, owner-operated municipal utilities, institutions under public law, ancillary municipal utilities, water and soil associations, public-law companies AG/GmbH (plc, limited liability company), mixed public-private companies AG/GmbH (plc, limited liability company), autonomous companies AG/GmbH (plc, limited liability company), and other private-law utilities [29]. Specifically, during the period 1997-2005, independent organizations undertook water supply services. However, more recently, most of the water supply entities were either transferred to municipal enterprises or followed PPP approaches [30]. The two main forms of water provision, namely private and public, as well as their shares related to water output, for the years 1993, 2008 and 2012, are presented in Fig. 1. As it is shown in Fig. 1, from 1993 to 2008, many municipalities delegated their water services to private operators. However, since 2012, there is a significant wave of water remunicipalization [31]. Table 3 presents some of the German municipalities that privatized their water services along with the type of contract they signed, the water company involved, the duration of privatization, the current status and the reasons for remunicipalization.

Nowadays, more and more German municipalities proceed to the remunicipalizion of their water services, since the consumers and the city councils have realized that privatization resulted in high water tariffs and excessive profits for private operators [25]. Meanwhile, the largest private water companies have either passed into the ownership of municipalities and public sector companies (in Gelsenwasser, 98.5% of shares are owned by the cities of Bochum and Dortmund, in Energie AG, 49% of the shares are owned by public sector companies and banks) or have withdrawn from the water sector (RWE) [26].

4.3. Romania

Until recently, in Romania, municipalities were responsible for water provision. However, the water sector of Romania is in a process of regionalization. The local authorities are encouraged by the EU to establish an Intercommunity Development Association, in order to delegate their water services to a Regional Operating Company [33]. Regionalization can be seen as a first step for water privatization, due to the fact that one of the main

^{1.} In 2012, the average water tariff of public water was 1.88€, in contrast to the private water operators' tariff which was 2.08€.

^{2.} Specifically, in 2007, SAUR was acquired by a consortium led by the French state bank Caisse des Dépôts et Consignations (CDC), which holds 47% of its shares. In 2009, Suez was merged with the state-owned Gaz de France (GdF) and 12% of Veolia's shares are owned by the French government

Table 2 List of French Municipalities which remunicipalized their water services

French municipalities	Contract	Company	Status	Period	Reasons for remunicipalization
Durance-Luberon	Concession/ 12 years	Suez	Expired	1984–1997	High water tariffs
Venelles	Concession/ 34 years	SAUR	Terminated	1974–2001	Water tariffs' increase, no investments in water supply systems, health risks for users
Grenoble	Concession/ 25 years	Suez	Terminated	1989–2001	Corruption of city council, change of city council, campaign by a local water movement and a series of lawsuits
Neufchâteau	Concession/ 30 years	Veolia	Terminated	1992–2001	Water tariffs' increase
Varages	Lease/20 years	Suez	Expired	1992–2002	Change of city council, campaign by local community
Castres	Concession/ 30 years	Suez	Terminated	1991–2003	Water tariffs' increase, campaign by local community, lawsuits, change of city council
Châtellerault/ Naintré	Lease/16 years	Veolia	Expired	2001–2007	Water tariffs' increase
Paris	Concession/ 25 years	Veolia/ Suez	Expired	1985- 2009	Water tariffs' increase, limited investments in water supply systems
Annonay	Concession/ 50 years	SAUR	Expired	1960–2010	Water tariffs' increase, campaign by local community
Évry Centre Essonne	Concession/ 20 years	Veolia	Expired	1991–2011	High water tariffs, change of city council
Saint-Jean-de-Braye	Lease/12 years	SAUR	Expired	1999–2011	Water tariffs' increase, change of city council
Brest Metropole	Concession/ 25 years	Veolia	Expired	1987–2012	Non-transparent finance, campaign by local water movement
Rennes	Concession/ 120 years	Veolia	Expired	1892–2013	Water pollution, high water tariffs, corruption of city council, campaign by local community
Castelsarrasin	Lease/25 years	SAUR	Expired		High water tariffs, change of city council
Courgent	Lease/12 years	Suez	Terminated	2011–2014	Water tariff's increase, campaign against privatization
Nice	Concession/ 63 years	Veolia	Expired	1952–2015	Political decision
Montbeliard	Concession/ 30 years	Veolia	Terminated	1992–2015	High water tariffs
Troyes	Lease/20 years	Veolia	Expired	1995–2015	Political decision
Blois	Lease/25 years	Veolia	Expired	1990-2016	High water tariffs
Montpellier Méditerranée Metropole	Concession/ 25 years	Veolia	Expired	1990–2016	Favourable financial conditions for the private company, poor maintenance of water networks, high water tariffs
Bordeaux	Concession/ 30 years	Suez	In Process/Decision for Remunicipalization	1991–2019	Water tariffs' increase, campaign against privatization, the city council is unable to terminate the contract until 2019

Source: Kishimoto et al. [25].

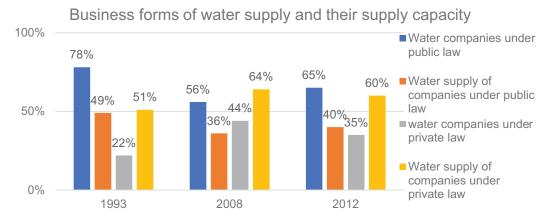


Fig. 1. Business Forms of Water supply and their supply capacity. *Source*: [32].

Table 3
List of German Municipalities which remunicipalized their water services

German municipalities	Contract	Company	Status	Period	Reasons for remunicipalization
Bergkamen	Concession	Gelsenwasser	Terminated	1994–2008	Historical municipal task, political decision, desire for profits to stay locally, experienced public company, supply of public goods by one provider
Stuttgart	Concession	EnBW	Expired	1999–2013	Campaign by local community, referendum about remunicipalization
Solingen	Joint Venture	MVV Energie AG	Terminated	2001–2012	High water tariffs, campaign by local community, scandal about the contract
Berlin	Joint Venture	Veolia/RWE	Terminated	1999–2013	Water tariffs' increase, secret contract, massive employees' dismissals, underinvestment in infrastructure, local campaign
Postdam	Joint Venture	Eurowasser	Terminated	1997–2000	Conflict between the city council and the private operator, water tariffs' increase

Source: Kishimoto et al. [25].

financing sources is the private capital through PPP contracts [33]. Even though the privatization of the Romanian state-owned companies has begun since 19913 [34], water privatization has not been applied widely yet. Many attempts have been made by the Romanian government [35] and international institutions and many programs have been implemented (PHARE, ISPA, SAPHARD) for the privatization of water services [36]. Nevertheless, seven municipalities have proceeded in water privatization, four of them through concession contracts (Bucharest, Ploiesti, Falticeni, Timisoara) [37]. However, the most notable example of water privatization is that of Bucharest, where the results of privatization have not been satisfying. Specifically, the firm proceeded in employees' dismissals, disconnection of indebt users from the water services and tariff increases [38]. Important is the fact the tariff increases were allowed from

the council after its bribe by the firm [38]. After this failure, the Social Democratic party proposed a five-year moratorium on privatization [39], while a press release issued by the Ministry of Economist stated that the National Mineral Water Company is responsible for the protection of natural resources and their exploitation in sustainable conditions will remain a state-owned company [40].

4.4. Slovakia

The Slovak state was responsible for water supply through five water state-owned companies, till 1989. However, since 1990, this responsibility was undertaken by municipalities [41]. In order for Slovakia to access to the EU, many basic conditions had to be met; one of them was "the increase of the environmental level and the improvement of this state".

^{3.} The privatization of the Romanian state-owned companies has begun under the Privatization Law 58/1991, which states that all commercial companies are open to privatization through a wide range of market methods.

In order to achieve these goals, Slovakia implemented the "Project of Assistance to the Slovak Republic in Preparation of Integrated Strategy for Accession to the European Union in the Sector of the Environment" and many other programs such as PHARE, SAPARD and ISPA [42]. These programs along with "'The Conception of the Transformation of the State Water Works" had as an objective the privatization of water services [37]. According to the transformational plan of the Slovak state, joint-stock companies have been gradually established, since 2002 [41]. However, only one of these companies has been privatized, as in the other companies, municipalities have remained as major shareholders. In Table 4, the failure of this privatization attempt in Slovakia is presented, providing information about the type of contract, the year of contract and the major shareholders.

As part of the aforementioned programs, three districts implemented privatization through lease/operation contracts in a pilot stage – Trencin, Komarno, Dubovany [41,37,42]. The most notable of these three cases is the case of Trencin, where the municipal company was sold for half of the original price (£1.15 million) due to the close relationship of the private party with the leading political party [38]. This company signed a memorandum on potential future collaboration with the international company Suez [38]. Also important is that the contract was so complicated that the European Commission ordered the renegotiation of the contract in order to provide them with the ISPA grant that they have applied for. However, the issue of transparency was not resolved even after the European Commission's intervention [38].

5. Critical evaluation of PPPs in the water supply sector

This research has highlighted the unsuitability of PPPs in water services in the EU countries. Supporters of privatization suggest that PPPs constitute a tool for efficient and effective management. Nonetheless, in all cases, the private

operators were unable to fulfill their promises; the existing infrastructure and the quality of services were not improved. Water tariffs rose exponentially and in some cases access to water was limited. The attraction of foreign investments through PPPs has been proven false, while simultaneously a significant underinvestment in water infrastructure has been observed.

Generally, the nature of water services does not allow PPPs to work effectively, due to structural issues. As a natural monopoly, water services can only be provided by one operator, which means that the supplier has an absolute advantage and consequently complete control over the market [43]. So, as it happens in most of cases, the provider is able to increase the water tariffs, without any provision or governmental regulation [44]. Moreover, the private operator might disconnect users from water services due to debts acting against public welfare and the human right of water provision, as evidenced by the case of Romania.

Another argument of PPPs proponents, that PPPs minimize public expenditures and risks while at the same time benefit the public by providing a higher quality of services, is considered null [4]. Based on the European directives, in most of the examined cases, governments granted long-term loans, subsidies and high profits to private operators; moreover, they assured private operators with profits that, in case companies failed, they were obliged to reimburse them. These guarantees constitute unwanted risks for the government. Therefore, PPPs are tied with those risks that governments will have to consider carefully before proceeding in the act of privatization [43].

A main practical drawback, that governments will also have to consider, is the choice of the appropriate partner. Usually, governments choose large international companies as participants, either due to the inability of the legislative framework to support the selection process, or because, in the tendering procedure, only few international powerful companies are involved. However, even in the cases that

Table 4 List of Joint Ventures in Slovakia

Municipalities	Contract	Company	Year	Shareholders
Bratislava	Joint Venture	Bratislavská vodárenská	2002	Bratislava – 59.3%
		spoločnosť		Other municipalities – 32.3%
				Bratislavská vodárenská spoločnosť, a. s. – 8.4%
Nitra	Joint Venture	Západoslovenská vodárenská spoločnosť	2002	Municipalities – 100%
Piestany	Joint Venture	Trnavská vodárenská spoločnosť	2002	Municipalities – 100%
Kosice	Joint Venture	Východoslovenská vodárenská	2004	Kosike – 20.4%
		spoločnosť		Other Municipalities – 67% VVV, a.s. – 1.5%
Poprad	Joint Venture	Podtatranská vodárenská spoločnosť	2004	Veolia – 100%
Zilina	Joint Venture	Severoslovenská vodárenská spoločnosť	2006	Municipalities – 100%
Banska Bystrica	Joint Venture	Stredoslovenská vodárenská spoločnosť	2002	Municipalities – 100%

Source: Association of Water Companies [41].

governments choose a national company, international corporations are still getting involved, as seen in the case of Slovakia. Noteworthy is that, in most cases, the companies that eventually achieve the partner status are those with great political influence and economic power, resulting in intensified corruption phenomena.

Indeed, systematic corruption is a determining factor of privatization failure in water services through PPPs [7]. Since privatization is a political decision, the choice of the politicians in charge can be influenced by various personal motives, which sway them one way or another [23]. The lack of supervision and control of PPPs' procedures is associated with corruption phenomena [7]. This has resulted in two distinct situations. In most cases, bribery and the company's influence on the government have been criticized by the public, while in other cases, the secretive form of the contracts and the favourable treatment of a government towards a certain company may not constitute evidence for corruption, even if their actions against public benefit are common knowledge.

Consequently, many European cities decided on the remunicipalization of their water services, deterring from any further acts of privatization.

6. Conclusion

The European experience from water privatization through PPPs suggests that the projects have been implemented in different ways, extend and intensity and with different motivations. There are six different PPP models that have been applied, since the mid 1980s, and the considerable number of PPPs in the European water sector is helping shape policy makers views for future projects.

The evidence seems to be pointing towards the conclusion that the aspirations of privatization proponents have been discouraged. The results from PPPs in water supply are more or less converging; excessive water tariff increases, poor maintenance of water networks, underinvestment in water supply systems and infrastructure, corruption phenomena and scandals, non-transparent finance, unfavourable financial conditions for private companies, as well as environmental issues such as water pollution and health risks. The findings are consistent with the international evidence on the issue.

Consequently, the outcomes from water privatization led many European cities to revise their aspects and to proceed with the remunicipalization of their water companies. The remunicipalization movements emerged either from municipal councils and/or local community campaigns. In some cases, the return of water supply to the public sphere was a political decision. Yet, despite the negative experience from the implementation of PPPs in the water sector and the review of the policy in the European leading countries, such as France and Germany, the European Union continues to exert pressure and give directions, especially to the new and vulnerable members of the Community, for privatizing their water supply companies through PPPs.

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