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Exploring the Democratic Legitimacy of Privatization in the Water Sector: Two Cases in Switzerland

Eva Lieberherr

1 Introduction

The question of how to manage and organize water supply and wastewater remains debated in practice and in the literature. A key aspect in this discussion is the issue of privatization and the more general reorganization of water operators to become increasingly independent from the municipal government (Furlong 2012; Schouten 2009). Privatization can be depicted along a continuum from a shift in ownership from the government to a private actor to varying degrees of private sector involvement such as contractual agreements for certain tasks (Lieberherr 2012; Schouten 2009; Ménard and Saleth 2013). However, privatization need not entail a shift of ownership (Budds and McGranahan 2003). For

E. Lieberherr (✉)
Natural Resource Policy (NARP), Institute for Environmental Decisions, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland

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instance, formal privatization can involve a change from public to private law, while the ownership remains public (Wackerbauer 2007).

A key aspect underlying the privatization debate is the concept of democratic legitimacy, i.e., the degree to which citizens have influence—through democratic institutions—on their water operators (Herzberg 2015). In a system of public management, citizens can characteristically influence operators either directly, via a public vote, a citizen initiative or referendum, or indirectly through political delegates who have decision-making competences over the water operators' policies and projects. With the privatization of public services, citizens' influence, and hence democratic legitimacy, is typically assumed to decrease (Schmelzle 2008; Benz and Papadopoulos 2006b).

Historically the household water supply and wastewater sectors have been predominantly owned and operated by public actors, and classically by municipalities with city councilors holding decision-making competences; an exception is France, where private actors, that is private companies, have had a long history in the management of water services (Citroni 2010). Since the neoliberal turn in the 1980s, the public model has been questioned and a reorganization of operators to become independent from local government has increased in urban services (Lorrain and Stoker 1997; Furlong 2012). However, most water operators worldwide remain under some form of public organization. Liberalization, i.e., the removal of market barriers and the free market competition (Wackerbauer 2007) has not taken hold in this sector, as there has been re-regulation rather than deregulation (Schiffler 2015b; Ménard 2009). Moreover, during the last fifteen years, a reform of (re)municipalization, or the transfer back from the private to the public domain, has emerged (Hall et al. 2013). In addition, community alternatives to privatization have been proposed (see Chap. 2), which, however, have not necessarily led to an increase in democratic legitimacy (Bakker 2008). While often financial reasons drive privatization, recent research indicates that democratic legitimacy concerns tend to underlie the reverse trend (Wollmann 2010; Pahl-Wostl 2015; Lieberherr et al. 2016; Schiffler 2015a). Given general trends toward (formal) privatization, the question arises regarding how these reforms affect democratic legitimacy in such a context. Specifically, do privatization reforms lead to a decrease in democratic

legitimacy in comparison to public governance in Switzerland, a country with predominant publicly controlled water sectors?

This chapter focuses on household water supply and wastewater service provision (henceforth referred to as the water sectors) in urban areas in industrialized countries. To embed the Swiss case within the European water management context, different forms of water privatization across Western Europe are briefly reviewed in the next section. Then privatization reforms (or the lack thereof) in the Swiss water sectors are addressed in Sect. 3. To provide insight into how privatization may impact democratic legitimacy aspects of water service providers, the analysis hones in on a comparative case study of two cities: public water operators in Zurich are contrasted with formally privatized water operators in Berne.

2 Water Management in Western Europe

Many different management and organizational forms exist in the Western European water sectors, with great variation between as well as within countries (Lieberherr et al. 2015; Massarutto et al. 2007). In this context, a continuum from public and private governance has been established in the literature (cf. Ménard, 2009; Ménard and Saleth 2013). With a blurring between the public and private domain, public providers have become increasingly autonomous and private sector participation has become more widespread (Allouche et al. 2007).

Material privatization remains rare, as a full transfer of infrastructure ownership and operations to private actors only exists in England and Wales, where the government divested the public water companies to multinational corporations in 1989 (Wackerbauer 2007).

More common than complete divestiture is *partial privatization*. Accordingly, the ownership is shared between public and private actors and the actual management typically occurs through private actors (OECD 2009; Thom and Ritz 2006). Such partial privatization can be found in Germany, where regulation occurs via supervisory boards and competition happens in the water product and service markets (Moreau-Le Golvan and Breant 2007; Wackerbauer 2008). Unlike in England, where privatization is uniform, partial privatization typically

and primarily takes place in large cities. For instance, many other forms of water provision exist in Germany, such as public bureaus and task-specific associations (*Zweckverbände*), with public ownership and management remaining predominant. However, a highly publicized example of partial privatization is the case of Berlin, which became remunicipalized in 2013 (Schiffler 2015a).

Another form of privatization is *delegated private management*, where public actors award a private actor the right to sell water services within a public ownership frame (Lieberherr et al. 2015). This predominates in France and Spain (Schouten and Pieter van Dijk 2007). Also known as the French model of *outsourcing* or *affermage*, this entails that operational responsibility is transferred to private actors (Lieberherr et al. 2015). The private operator thus has the responsibility to maintain the infrastructure for the duration of the contract (Massarutto et al. 2007). Despite a degree of remunicipalization in France, the majority of the French population currently receives water services from private operators, while asset ownership remains public; hence, outsourcing to private providers remains the dominant water provision model in France (Lieberherr et al. 2016).

An increasing mode of water service provision in Western Europe is *formal privatization* and delegated public management, where ownership is public and the government retains indirect control over the operations, through political delegates such as city councilors. This involves a shift from public to private law (Schouten 2009; Lieberherr et al. 2015) and predominates in the Netherlands, but can also be found in many other countries including Switzerland (Schouten and Pieter van Dijk 2007).

Finally, *direct public management* remains a widespread form of service provision across Western Europe—providing more than 90 percent of water and wastewater services (Citroni 2010; Luis-Manso et al. 2007). This entails that water and wastewater infrastructure is publicly owned and operated (Schouten and Pieter van Dijk 2007). Direct public management typically involves hierarchical monitoring by government departments (Massarutto et al. 2007). Exemplary countries of direct public management include Luxembourg, Denmark and Switzerland (Schouten and Pieter van Dijk 2007).

3 Water Privatization in Switzerland

3.1 General Trends

Water provision and wastewater treatment are considered public tasks and direct public management remains predominant in Switzerland (Luis-Manso 2005; Lieberherr et al. 2016). Historically, municipalities predominantly formed task-specific associations (*Zweckverbände*) and public bureau forms (*Regiebetrieb*), with a dominant municipality providing services for other municipalities in a contractual consortium (*Sitzgemeinde*), to provide water services in Switzerland.

The Swiss water sectors have undergone an incremental shift toward delegated public management and formal privatization since the 1970s (Lieberherr et al. 2016). This entails that utilities' legal status has changed, as they have gained organizational, operational and financial autonomy from the "core" administration (Grossi and Reichard 2016). Material privatization remains rare in Switzerland (Grossi and Reichard 2016). Only one fully private water supply operator—the privately owned Zug waterworks—exists and a small percentage of wastewater service operators (ca. 5 percent) are jointly owned by public and private bodies, the rest are publicly owned (Luis-Manso 2005; Lieberherr 2012). No cases of remunicipalization can be found (Lieberherr et al. 2016). Within the constraints of a model based on public ownership and predominantly public control, there is private sector involvement in the form of short-term contracts for specific tasks such as implementing new technology (Lieberherr et al. 2016). Particularly in smaller municipalities, maintenance of infrastructure tends to be contracted out to private companies (Luis-Manso 2005). For instance, such multinationals as Veolia Environment and Suez are present in Swiss wastewater treatment (Luis-Manso 2005). However, the Swiss water market for household supply and wastewater remains non-competitive.

A key reason for the predominant public control in the Swiss water sectors has been the lack of legitimacy associated with privatization (Luis-Manso 2005; Sicher 2011). Or put differently, citizens value having (in) direct influence on their water operators, particularly on the water supply side. Indeed, public opinion has been found to underlie water sector

reforms in Switzerland (Luis-Manso 2005) and this is not in favor of privatization: a survey by the Swiss Gas and Water Industry Association, representative of the Swiss population, shows that 93 percent of the population is against water privatization (Sicher 2011). A general argument anti privatization, beyond democratic legitimacy, is that the public water systems work well. The population is satisfied with the quality of drinking water and is afraid that privatization would lead to lower quality and higher prices (Luis-Manso 2005). Citizens, public servants and politicians tend to be critical of water privatization, as they regard privatization as generating profits, which they consider incompatible with the ethic of public water provision (Pfammater et al. 2007). Despite pressure to open up its water services to the private sector, a widespread understanding exists that liberalizing the water market and enabling international competition is unlikely to take place in the Swiss water sectors (Luis-Manso 2005).

During the early 2000s, a politically active lobby, including the Working Group on Water as a Public Property (comprised of non-governmental organizations and politicians) as well as Swiss unions and charities (e.g., Helvetas, Swiss Coalition of Development Organizations, Swiss Union of Public Services) opposing privatization existed (Rothenberger 2002; Luis-Manso 2005). At that time, it was expected that the liberalization of the electricity and gas market was going to affect particularly water supply management. As electricity, gas, and water supply services have been grouped in the same entity under municipal control in Switzerland, the reforms in the electricity and gas sectors could have led to major changes in the water supply sector. However, the main characteristics and the public control of both water sectors, but particularly the water supply sector, have remained, with some cases of delegated public management and formal privatization emerging, which are addressed in the sections that follow.

3.2 Methods for Analysis of Two Water Cases

Before jumping into the case studies, the methods for this analysis are briefly explained.

3.2.1 Case Selection

To study the complex, real-world situation of water provision in specific urban contexts, with many uncontrollable variables, a case study design is employed (Yin 2006). To shed light onto reforms in the Swiss water sectors, two contrasting cases, i.e., cities with differing water management forms are analyzed: Zurich, which remains under public management, and Berne, which has undergone legal changes involving delegated public management and formal privatization.

Zurich and Berne are two major cities in Switzerland, Zurich being the largest and Berne the third largest in the country as well as the capital city. As is common in Switzerland, wastewater and water supply are managed by separate organizations in Zurich and Berne. The operators in both cities are held accountable to the cantonal (constituent state) administrations. The canton of Berne is typically described in contrast to the canton of Zurich: while the latter is seen as being rather conservative and averse to reforms, the former is viewed as being much more open to reforms, with less municipal autonomy sentiments than in Zurich (Schedler 2003). As both selected cities exemplify these reforms, they are fitting for a contrasting case study analysis. The focus of the comparison is in terms of how the water operators at the city level are managed and how this affects democratic legitimacy.

3.2.2 Operationalizing Democratic Legitimacy

Democratic legitimacy falls under the heuristic of input legitimacy (in contrast to output and throughput legitimacy cf. Scharpf 1999). Underlying input legitimacy are two differing conceptualizations of democracy (Heinelt 2002). On the one hand, input can be based on the principles of *liberal representative democracy*, underlain by state constitutions in direct and representative democracies. In terms of representation, the process of decision-making itself is assumed to be fair as citizens' interests are transmitted into the system of governing via general elections and delegation. Input legitimacy has traditionally followed along these lines of liberal representative democracy. On the other hand, input

legitimacy can be based on *deliberative democracy*, underlain by a more "normative program of good governance" (Bang and Esmark 2009, 15) through "free, open and public debate (or dialogue)" (Heinelt 2002, 24). In terms of representation, this relates to participatory governance, where all affected actors should have a right to participate *directly* (Schmitter 2002). Moreover, the form of participation focuses on deliberation, demonstrations, naming and shaming in the mass media, widespread information dissemination as well as citizen boards, consumer councils, regulatory boards, etc., rather than simply a public vote (Taiclet 2006; Heinrich 2011).

In this analysis, the former conceptualization of democracy is employed. Hence, the focus is narrow, addressing direct and representative democratic elements (institutional form) rather than constructivist preconditions (Schmidt 2013). The analysis is thus based on government responsiveness to citizens, which can be assessed in terms of political participation (Scharpf 1999; Mair 2009). Accordingly, democratic legitimacy is measured based on citizens' ability to influence decision-making either directly by voting on substantive issues or by electing politicians into office (Lieberherr et al. 2016). This can be defined on a range from high to low democratic legitimacy:

- *High*: direct voting on substantive issues of the water operator as well as indirect via electing politicians and consultation;
- *Medium*: only indirect influence through elections and consultation;
- *Low*: no influence, i.e., only being informed and consulted.

3.2.3 Data Sources and Analysis

The data are based on previous research by the author (Lieberherr 2016, 2012), which included desk research (analysis of the cantonal and city legislation, the annual reports of the water operators, etc.) and in-person interviews (with the managers of the water operators, political decision-makers, members of industry associations, etc.). Additional desk research was done by the author in 2016 on the Berne water supply case (assessing legislation relevant to this operator, contracts, policy-relevant documents like messages from the city council, etc.). The laws, reports and interviews were assessed in terms of (1) the types of management forms

(see Sect. 2) to determine whether a reform has taken place and (2) the degree to which citizens can have influence on the water operators, either directly or via political delegates.

3.3 Comparison of Water Management in Two Cities

3.3.1 Direct Public Management in Zurich

In Zurich, the water sectors are under direct public management (see Figs. 6.1 and 6.2). The wastewater and the water supply operators are both non-autonomous, without a legal personality, under public law and ownership, embedded in the public administration, with direct oversight by Zurich's City Council, the Parliament and the public. The wastewater operator (*Klärwerk Werdhölzli*) is within the city's Public Works Department. The water supply operator (*Wasserversorgung Zürich*) is under the city's Industrial Services Department. Their roles and obligations are stated in the cantonal Water Resources Law, the Water Protection Act, Food Law and other relevant administrative bylaws.

Both are public bureaus in the form of contractual consortia (*Sitzgemeinde*): the wastewater operator has six contract municipalities, where each municipality has an individual contract with the Zurich

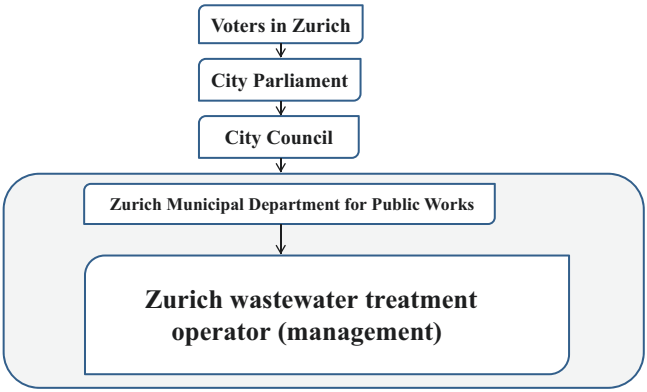

Fig. 6.1 Zurich wastewater treatment operator management and governance structure

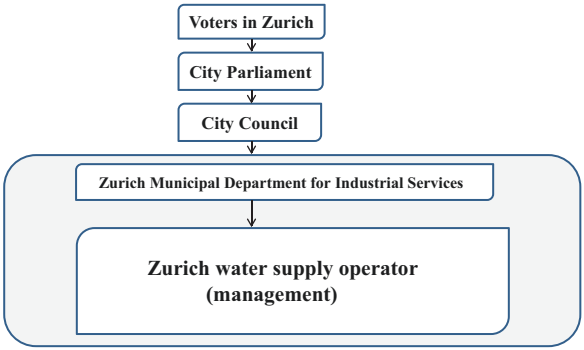

Fig. 6.2 Zurich water supply operator management and governance structure

operator to have their wastewater treated by the city. The water supply operator has thirteen contracts with municipal associations that define the operator's distribution of water supply to seventy-six municipalities. The contract municipalities would like to have decision-making clout and form an association (*Verbund*) together with the city of Zurich. Such an organizational form would give the contract municipalities more rights. Yet the Zurich operators do not see a need for change (Lieberherr 2012). Overall, the issue of democratic legitimacy plays a role in the governance constellation in Zurich: The political actors in the city (a) would like to maintain their influence and (b) are not willing to "diffuse" this control by changing the organizational form to allow the contract municipalities to have decision-making rights.

3.3.2 Formal Privatization and Delegated Public Management in Berne

In Berne, the water sectors have undergone formal privatization (on the wastewater side) and a shift to delegated public management (on the water supply side). The wastewater operator (*ara Region Bern*) is a joint-stock company, under private law, with ten stockholding municipalities who are the co-owners; the city of Berne has the majority of shares (see Fig. 6.3). Hence, although the Berne wastewater operator underwent a legal change, it remains under public ownership. In contrast to the

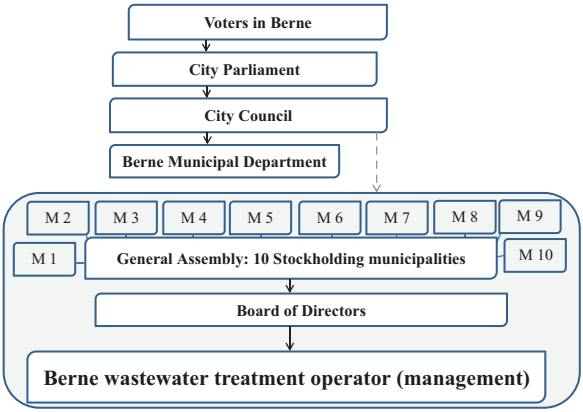

Fig. 6.3 Berne wastewater treatment operator management and governance structure

Zurich operators, this operator has a statute, in addition to the public laws specifying its role and obligations (Lieberherr 2016).

The water supply operator in Berne (*Energie Wasser Bern ewb*) is responsible for providing water, natural gas and district heating. It is an independent institution under public law and public ownership, 100 percent in the hands of the city of Berne, whereby the City Council has control over the operator[1] (see Fig. 6.4). The water supply operator has an additional ordinance (*Wasserverordnung der ewb*) and is obligated to fulfill mandates in its performance contract (*Leistungsvertrag*) (Stadtrat Bern 2001b). The water supply operator is also the majority shareholder of the *Wasserverbund Region Bern AG* a joint-stock corporation, i.e., under private law, that provides water supply to the region of Berne. This regional operator has ten participating municipalities, which are the shareholders. In this chapter the focus is on the operator for the city of Berne and not this joint-stock corporation, which in form is similar to the wastewater operator above. Yet it is important to note that (1) the Berne city water supply operator has delegated the responsibility to procure water to this joint-stock corporation (Verwaltungsrat 2010) and (2) as the largest shareholder of the *Wasserverbund Region Bern AG*, the Berne city water supplier operates most of the joint-stock corporation's water facilities.

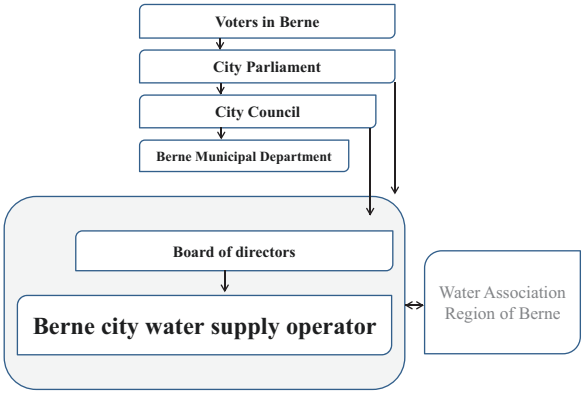

Fig. 6.4 Berne water supply operator management and governance structure

In contrast to Zurich, both operators in Berne have their own legal personality and hence legal capacity to enter contacts in its own name. Moreover, as shown in Figs. 6.3 and 6.4, the operators are no longer directly linked to the political system, hence decision-making occurs at the operational level (internal management), which is faster than having to pass through the political system (Lieberherr 2016).

The wastewater operator's reform occurred in 1996; previously, the operator was a public bureau, providing wastewater services to Berne and nine surrounding municipalities. In short, it formerly looked very similar to the current model of the Zurich wastewater operator described earlier. The reason for the change was primarily financial: the joint-stock form was deemed as necessary to enable the implementation of long-needed renovations (Lieberherr 2016). The aim was to free the operational level from the political system to be able to take action and improve its operational performance and decision-making efficiency. Yet there was also a democratic element, as it was argued that this change was necessary to address the tension between the city of Berne and the surrounding contract municipalities who wanted to have more say about the wastewater operations (Lieberherr 2016). Hence, legitimacy was a stake in the debate for the reform.

The water supply side underwent the shift from direct to delegated management in 2002, when the city of Berne decided to fuse the previous operator *Gas-*, *Wasser- und Fernwärmeversorgung Bern*, which was a

public bureau within the municipal department and did not have its own legal personality, with the *Elektrizitätswerk Bern*. Together these two organizations formed the new operator: *Energie Wasser Bern* (ewb). The driver for the reform was the liberalization of the energy market in Switzerland. The city of Berne was concerned that the public operator would not have the flexibility or the tools to be able to handle new market pressure. Hence, the city of Berne decided that an institutional change was needed (Stadtrat Bern 2001a). With this, the aim was to increase the operator's decision-making efficiency, so it could react to the fast changing environment. An additional goal was to be able to increase the quality of water, natural gas, and electricity and district heating (Stadtrat Bern 2001a). All in all, democratic legitimacy was not found to be a central point in the debate for the reform of the Bernese water supplier.

3.3.3 Democratic Legitimacy

To address the question of how the preceding reforms affect democratic legitimacy, we compare the citizens' ability to influence the water operators in Zurich and Berne. This is done by assessing the degree of democratic legitimacy, as operationalized in Sect. 3.2.2.

Zurich: Primarily the financial aspects link the operators in Zurich with the political system. The director of the *wastewater* operator has discretion for projects up to 200,000 Swiss francs (Lieberherr 2012). After that, financial decisions must be approved by the City Council and Parliament. And for new projects (e.g., for treatment technology) that are more than twenty million Swiss francs, a public vote is obligatory. On the water supply side, the operator has more leeway: the director has discretion over financial decisions up to one million Swiss francs before they have to go through the political system. And new projects larger than sixty million have to be approved by the public (Lieberherr 2012).

Both operators' annual budgets must be approved by the City Council and Parliament. Again, this political control provides an indirect link between the citizens and the operators. Moreover, if citizens regard certain large projects as unjustified—or do not agree with how a project is developed—then they have a chance to veto a large project through a referendum.

The water supply and wastewater operators' directors—responsible for the management of the utility—are appointed by the City Council. Hence, citizens can indirectly, i.e., through democratic delegation, affect the operators' management. Moreover, as they lack their own legal personality, both operators are regulated by the respective public laws, which link them to the political system. The operators are also consulted by the decision-makers, as they are pre-informed before a new law is passed (Lieberherr 2012).

In contrast to the aforementioned influence of citizens, both operators have a lower level of democratic legitimacy when it comes to their contract municipalities. The contract municipalities have no decision-making rights, as they only participate by paying the operators a fee in exchange for having their wastewater treated or receiving water supply. In addition, they are informed and consulted once a year (Lieberherr 2012). Hence, the citizens in the contract municipalities lack democratic influence on their water operators.

Berne: In contrast to Zurich, the citizens in Berne cannot vote directly on the operators' policies or financial projects, as these companies are no longer organized within the municipal departments—see Figs. 6.3 and 6.4 (Stadtrat Bern 2001a; Lieberherr 2016). Instead of being appointed by the City Council, as is the case in Zurich, the directors (operational managers) of the Berne operators are selected by the operator's Board of Directors. Further, in contrast to Zurich, the water operators are not solely regulated by the public laws, but have specific statutes and regulations (e.g., the wastewater operator's statute and the water ordinance) that define roles and responsibilities, which are no longer directly coupled with the political system.

In comparison to the Zurich cases, the wastewater operator in Berne has more financial autonomy: no decisions have to be passed by the City Council, the Parliament or a public vote; the representative democratic link has been severed (Lieberherr 2016). The Board of Directors has complete financial authority, with no cap on its financial autonomy; the director has discretion up until half a million Swiss francs, anything larger has to be passed by the Board of Directors. Neither the Parliament nor the City Council can influence the budget. The Board of Directors could legally sell the wastewater operator without consulting the munici-

palities. However, as the Board of Directors is comprised of municipal delegates, the seats are based on shares of stock (see Fig. 6.3); the link to the citizens is indirect, through electing representatives.

On the water supply side, the operator remains more closely linked to the political system. The City Council and the Parliament have the following oversight: the City Council elects the Board of Directors and its president, and has the right to recall the members; one of the Board of Directors has to be a member of the City Council, but the rest do not have to be linked to the political system (Stadtrat Bern 2001b). The City Council also approves the annual budget and the financial statements, makes decisions about the appropriation of the accumulated profit and informs the Parliament about the annual report, the annual budget and the financial statement. The City Council has discretion over whether large company shareholdings (more than seven million Swiss francs) can be sold. It can further decide to make the population vote on this matter (Stadtrat Bern 2001b). The water supply operator is thus under more democratic influence than the wastewater operator in Berne, albeit its Board of Directors is less representative. However, in terms of operational decisions, the Board of Directors has ultimate discretion, much like the wastewater operator, and also delineates the water ordinance (Stadtrat Bern 2001b).

Regarding the legal changes in Berne, the public had to vote on both the reforms of the wastewater and water supply operator. Indeed, in terms of the wastewater operator, a public vote in each participating municipality was required in order for Berne to become a joint-stock corporation with its ensuing de-coupling from the political system. During the reform process particularly the City Council was a leading actor. Moreover, within the current organization of the wastewater operator, the participating municipalities have relatively equal access to and influence on the decision-making process, which contrasts with the Zurich cases. This spread of influence across the municipalities is possible because the dominant city of Berne, who owns 76.58 percent of the shares, restricted itself in terms of votes: despite the fact that stock ownership determines voting rights (each stock is correlated with one voice), the city took only 50 percent of the votes in the General Assembly.[2] The rest of the partners have 50 percent altogether (ARB 2010). Making decision-making more equal between the city of Berne and the surrounding municipalities was

a key factor for the reform. Now the citizens in the surrounding municipalities have indirect influence—through political delegates—which they lacked prior to the reform.

On the water supply side, the policy-making of creating the current organization was also democratic: both the City Council and the Parliament were involved in the decision-making process and the final decision was made by the citizens of Berne, as they voted on the creation and outsourcing of the operator in 2001 (Stadtrat Bern 2001a). Similarly, the stock-holding municipalities in the Water Association Region of Berne have voting rights.

3.3.4 Summary

Table 6.1 summarizes the results of the two cases and specifically differentiates between direct and indirect democratic legitimacy as well as whether this is found in the city itself (i.e., in Zurich or Berne) and in relation to the contract or joint-stock municipalities who receive water services from the city operators. This then leads to an overall assessment, based on the operationalized degrees of democratic legitimacy in Sect. 3.2.2.

Table 6.1 Comparison of democratic legitimacy in Zurich and in Berne

City	Democratic legitimacy		Contract/ stock-holding municipalities	Overall
Zurich	Direct	– Voting on new and large projects – Right to veto through referendum	– No means to directly influence	– *High* for city – *Low* for contract-municipalities
	Indirect	– Financial decisions and budgets needing to pass City Council and Parliament – Directors appointed by City Council – Internal change approval by City Council	– Informed and consulted once a year	

(*continued*)

Table 6.1 (continued)

City	Democratic legitimacy		Contract/ stock-holding municipalities	Overall
Berne	Direct	– None regarding large projects and financial decisions – Legal change underwent public vote	– No means to directly influence	– *Medium* for city and stock-holding municipalities
	Indirect	– Wastewater: financial decisions and budgets needing to pass Board of Directors, but this is comprised of municipal delegates – Water supply: operational decisions needing to pass Board of Directors (one member has to be City Councilor); Board of Directors elected by City Council; annual budget and the financial statements need to be approved by City Council; City Council has discretion over whether large company shareholdings (more than seven million Swiss francs) can be sold	– Each municipality has voting rights	

In sum, democratic legitimacy of the Zurich operators is mixed, as it is high vis-à-vis the citizens in the city of Zurich, but low for the citizens in the contract municipalities who receive water and wastewater services from the city's operators. In Berne, democratic legitimacy for both the city and the surrounding municipalities is medium, because in contrast

to Zurich, the citizens in Berne and the contract municipalities have indirect influence over the operators.

4 Discussion and Conclusion

This chapter addressed privatization reforms in the water supply and wastewater sectors, with a focus on Switzerland. The first section showed that water privatization reforms in Western Europe involve a broad range of forms, from material privatization, i.e., the transfer of assets from public to private actors, to formal privatization, which involves a legal change from public to private law without an ownership change. While material privatization with full divestiture remains rare, formal privatization is more widespread. Despite predominant direct public management, formal privatization and delegated public management can be found in Switzerland. To address the question whether democratic legitimacy is indeed lower in privatized than public systems of water provision, as is often assumed, the analysis focused on water operators in two Swiss cities: Zurich, which remains under direct public management, and Berne, which has undergone formal privatization and delegated public management.

The analysis of the water operators in Zurich and Berne indicates that privatization does not per se entail a lower degree of democratic legitimacy, when taking not only the city but also the contract municipalities into account. The Zurich operators are indeed more closely linked to the political system with a higher degree of democratic legitimacy vis-à-vis the citizens in Zurich than those in Berne. Particularly in terms of financial decisions, the Zurich operators are more subject to decisions by the City Council, Parliament and citizens than those in Berne. However, the city of Zurich operators' relationship with the contract municipalities weakens their democratic legitimacy, as the citizens in these municipalities have no influence on the operators and hence we find low democratic legitimacy here.

In contrast, in Berne, the citizens in the city have indirect influence on the water operators, as political delegates have decision-making competences. In terms of the operators' relationship with the surrounding

municipalities, however, its democratic legitimacy is higher than that in Zurich, as the citizens in these municipalities have indirect influence (through political delegates) on the operator. This democratic aspect was an important factor for the wastewater operator's reform and shows how a shift to private law (formal privatization) does not preclude an increase in democratic legitimacy. The Berne wastewater operator could have achieved the same degree of democratic legitimacy vis-à-vis the surrounding municipalities with a different organizational form, i.e., a form under public law, such as a task-specific association (*Zweckverband*). Yet this form would have entailed less decision-making freedom (Rothenberger 2002) and a goal of the reform was also to increase efficiency in decision-making.

This chapter provides insight not only in terms of the polysemy and fuzziness of the concept of privatization, but also with regards to the different means of implementation. Put differently: privatization and its implications for democratic legitimacy are not linear, especially when taking a broad perspective on the affected actors. With regards to privatization, we see that it is more complex than simply a transfer of assets from public to private actors, but that it can involve changes from public to private law as well as outsourcing to private actors, without private ownership. In terms of democratic legitimacy, i.e., the citizens' influence on the water operators, a key finding of this analysis is the indication that (formal) privatization does not per se decrease democratic legitimacy. By including the role of the contract municipalities in this analysis we saw that such a reform can even increase democratic legitimacy in certain ways, such as giving surrounding municipalities a voting right. This is important for the literature, which has indicated that democratic legitimacy concerns tend to hinder privatization (Wollmann 2010; Pahl-Wostl 2015; Lieberherr et al. 2016) and empirically for Switzerland in particular, as studies have found aversion to privatization due such issues (Pfammater et al. 2007). The results are specific to the cases studied in Switzerland and the assessment of such a narrow form of democratic legitimacy are tailored to developed countries with a functioning democracy, which merit further research. Yet in the context of reorganizing water operators to become increasingly independent from municipal governments in many industrialized countries, this analysis is relevant for other similar contexts and coheres with previous studies in this field (Furlong 2012).

Notes

1. ewb website: http://www.ewb.ch/de/ueber-uns/organisation/corporate-governance.html (accessed April 2016).
2. The General Assembly is the corporation's supreme body, comprised of representatives from the partner municipalities, chosen by the municipalities.

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Eva Lieberherr leads the research group "Natural Resource Policy" (NARP) at the Swiss Federal Institute of Technology (ETH, Zurich) in the Institute for Environmental Decisions since September 2014. She has been teaching policy analysis and environmental governance at ETH and the University of Berne since 2013.