

**Dissertationen am FB Wirtschaftswissenschaft der Freien Universität  
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# **Path dependence and change in the governance of organized systems**

**The case of water services in three German  
municipalities (1990-2010)**

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## **List of abbreviations**

AG: Aktiengesellschaft (Joint-stock company)

AöR: Anstalt des öffentlichen Rechts (Public corporation)

AöW: Allianz der öffentlichen Wasserwirtschaft (Alliance of public water industry)

APRIL: Netzwerk Antiprivatisierung Leipzig (Leipzig's network against privatization)

ATV: Abwassertechnischen Vereinigung (Association of sanitation techniques)

BBVL: Beratungsgesellschaft für Beteiligungsverwaltung Leipzig mbH (Leipzig consulting group for administrative participation)

BDEW: Bundesverband der Energie und Wasserwirtschaft (Federal Association of Energy and Water Industries)

BEWAG: Berliner Städtische Elektrizitätswerke (Berlin electricity utility)

BGW: Bundesverband der Gas und Wasserwirtschaft (Federal Association of Gas and Water Industries)

BSR: Berliner Stadtreinigung (Berlin City Cleaning Utility)

BUND: Bund für Umwelt und Naturschutz Deutschland (German Alliance for the protection of the Environment and the Nature)

BVG: Berlin Verkehr Gesellschaft (Berlin Public Transportation Utility)

BWB: Berliner Wasserbetriebe (Berlin Water Utility)

BWH: Berliner Wasser Holding (Berlin Water Holding)

BWI: Berlin Wasser International (Berlin Water International)

BZ: Berliner Zeitung

CBL: Cross Border Leasing

CCI: Chamber of Commerce and Industry

CDU: Christlich-Demokratische Union (Christian Democrats)

CGE: Compagnie Générale des Eaux (Became after that Vivendi and then Veolia)

DSt: Deutsche Städtetag (Association of German Municipalities)

DStGB: Deutscher Städte und GemeindeBund (German Association of Towns and Municipalities)

DVWK: Deutscher Verband für Wasserwirtschaft und Kulturbau (German Association for Water management and Land improvement)

DVGW: Deutscher Verein des Gas- und Wasserfaches (German Association for Gas and Water)

DWA: Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall (German Association for Water Waste Water and Waste)

ENBW: Energie Baden Württemberg

EVP: Energieversorgung Potsdam GmbH (energy utility Potsdam)

FDP: Freie Demokratische Partei (Liberal)

FR: Frankfurter Rundschau

GASAG: Berlin Gaswerke AG (Berlin gas utility)

GDF: Gaz de France

GDR: German Democratic Republic

GFR: German Federal Republic

GmbH: Gesellschaft mit Beschränkter Haftung (Limited liability company)

GWF: Gas und Wasserfach

KWB: Kompetenzzentrum Wasser Berlin (Berlin Center of Competence for Water)

KWL: Kommunale Wasserwerke Leipzig GmbH (Leipzig Water Utility)

LdE: Lyonnaise des Eaux

LVB: Leipziger Verkehrsbetriebe (Leipzig Public Transportation Utility)

LVV: Leipzig Versorgung und Verkehrsgesellschaft mbH. (Leipzig Society for Distribution and Transportation)

LVZ: Leipziger Volkszeitung

MNC: Multinational company

ÖTV: Öffentliche Dienste, Transport und Verkehr (Union for Public Services, Transportation, and Traffic)

PDS: Partei des Demokratischen Sozialismus (Party of Democratic Socialism)

PPP: Public-private Partnership

PREAG: Preussen Elektra AG

SPD: Sozialdemokratische Partei Deutschlands (Social Democrats)

SVZ: Sekundärrohstoff-Verwertungszentrum Schwarze Pumpe (secondary raw materials/recycling centre)

SWF: Stadtwerke Frankfurt/Main (Frankfurt/Main Utility)

SWL: Stadtwerke Leipzig (Leipzig energy utility)

TAZ: Die Tageszeitung

THA: Treuhandanstalt (Agency in charge of privatizing East German enterprises)

VEBWAB: Volkseigene Betriebe Wasser Abwasser (East German national company for water services)

VGf: Verkehrsgesellschaft Frankfurt (Frankfurt Public Transportation Utility)

VKU: Verband Kommunaler Unternehmen (Association of Municipal Utilities)

WPB: Wasserbetriebe Potsdam GmbH (Water utility Potsdam GmbH)

ZfK: Zeitschrift für Kommunalwirtschaft

ZVWALL: Zweckverband Wasser Abwasser Leipzig Land (Association for water and sanitation Leipzig Region)

# Introduction

## **Theoretical background and research questions**

During the last decade, the concept of path dependence has enjoyed a widespread popularity within the social sciences (for a literature review, see Beyer, 2010) and has become an established framework for explaining the creation, development and persistence of technological, organizational, or institutional arrangements despite pressures to change. Based on a process perspective, this framework has the advantage of explaining the creation of stable courses of action over time. Recently, scholars in the field of organization have defined path dependence “as a rigidified, potentially inefficient action pattern built up by the unintended consequences of former decisions and positive feedback processes” (Sydow et al., 2009: 696) or as “a property of a stochastic process which is obtained under two conditions (i.e., contingency and self-reinforcement) and causes lock-in in the absence of exogenous shock” (Vergne and Durand 2010: 737). Under a path-dependent regime, actors become "locked-in", i.e. remain stuck in a (potentially suboptimal) solution despite the existence of available alternatives. This lock-in situation is the product of self-reinforcements caused by mechanisms that work as systemic forces (Sydow et al., 2009: 691).

Despite its growing popularity, many scholars have criticized the classical theory of path dependence for being too deterministic (Deeg, 2005; Streeck and Thelen, 2005; Kay, 2005; Peters et al., 2005; Djelic and Quack, 2007), and for not providing a satisfactory conception of agency<sup>1</sup> (Botzem, 2010; Garud et al., 2010; Sydow et al., 2010; Sydow et al., 2012). Within the classical perspective on path dependence, scholars generally posit that external shocks are the only source of

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<sup>1</sup> Human agency is defined here as “the temporally constructed engagement by actors of different structural environments – the temporal-relational contexts of action – which, through the interplay of habit, imagination, and judgment, both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations” (Emirbayer and Mische, 1998: 970).

change and therefore exclude any endogenous explanations for path-breaking changes. This assumption builds on an overly mechanistic conception of stability, and leaves little room for human agency. Under the influence of path-dependence mechanisms, actors are trapped into a specific course of action. They are constrained by forces that they cannot influence and are unable to deliberately break a path (Sydow et al., 2009: 702). A great number of studies dealing with this perspective on path dependence have therefore developed an oversimplified and unilinear view of stability and change.

Based on the seminal work edited by Garud and Karnøe (2001), scholars recently adopted a more social-constructivist perspective on path dependence, defined as path creation. In this perspective, a path-dependent process is viewed as a social construct and not as an entity independent from human action. These studies have mainly focused on the influence of endogenous dynamics in creating and maintaining technological and institutional paths, and have therefore tackled several problems within the classical path dependence perspective. First, they demonstrated that actors play an active role in shaping self-reinforcing dynamics (Botzem 2010; Sydow et al., 2010). While mechanisms influence actors, these very mechanisms can in turn be manipulated by actors depending on their interests. According to this perspective on path dependence, mechanisms are above all the product of actors' ongoing interactions and shared interpretations. Second, scholars relied on embedded and distributed agency in order to account for the development of various technological paths across settings (Garud and Karnøe, 2003: 281). Since actors vary across settings and over time, paths may evolve in different directions depending on the concrete situations. Consequently, this perspective also moves away from an overly unilinear conception of path-dependent processes.

While these studies have paved the way for an actor-centered approach to path dependence, several blind spots need to be investigated further. First, organizational changes in path-dependent processes have not been the subject of much theoretical discussion and empirical examination (Dobusch, 2008: 143). Although the concept of path change has been studied within the broader frameworks of path generation (Djelic and Quack, 2007) and path constitution (Sydow et al., 2012), it has never been at the center of any study. As a matter of fact, the analysis of the emergence of various patterns of organizational changes in path-dependent

processes across local settings is still lacking in the literature on path dependence. Second, scholars have neglected to examine the role played by actors' concrete strategies and power relationships in bringing about or struggling against change in path-dependent processes. Important steps have recently been made in that direction (Botzem, 2008: 40; Sydow et al., 2012: 908). However, the role of actors' interdependencies in conducting reforms was not addressed and the strategies discussed referred more to general categories of continuity and change rather than concrete strategies defined and implemented by actors in a specific context. Last, scholars have acknowledged the fact that deviating from the path may lead to counter-reactions (Garud and Karnøe, 2003: 281). However, no real attention has been paid to the concrete implications of deviating from the path and to the nature of the expected and unexpected consequences that such changes may trigger.

To tackle these problems and examine the role of strategic collective action in bringing about or struggling against changes in organizational path-dependent processes in greater detail, I suggest examining organizational path dependence under the strategic analysis perspective developed by researchers of the *Centre de Sociologie des Organisations* in Paris. The main purpose of this approach is to unravel the problems of cooperation between actors with heterogeneous interests, different competences, and conflicting solutions, within an organized system (Crozier, 1972: 240–241). This framework highlights the incapacity of some organizations, called bureaucracies, to adapt to changes in their environment other than by relying on their intrinsic features, which in turn results in maintaining if not reinforcing the underlying problems of the organization (Crozier, 1963; 1970). Further fellows of this center criticized Crozier's analysis for only concentrating on intra-organizational processes and for overemphasizing organizational rigidities. These authors extended the framework to include the analysis of inter-organizational relationships (Crozier and Thoenig, 1976) and focused on the flexibility of organizational processes (Dupuy and Thoenig, 1985).

Organizational path dependence and strategic analysis have several compelling similarities. First, both frameworks provide a convincing analysis of organizational rigidities and shed light on the incapacity of organizations to adapt to their environment or to select a better alternative. For Crozier, this stability is caused by the emergence of vicious circles of bureaucracy, while for path dependence

organizational rigidities are the product of positive-feedback mechanisms<sup>2</sup>. They both focus on the influence of systemic pressures as a constraint on individual autonomy and therefore have an over-deterministic view of organizational change. For both frameworks, powerful actors outside the system or external shocks may cause change. At the same time, strategic analysis, like the social-constructivist perspective on path dependence, concentrates on organizational processes as a social construct. In these processes, agency plays a central role. Organizations are the results of ongoing actions and interactions between actors in a specific context. According to strategic analysis, actors can indeed act strategically but are at the same time constrained by their interdependencies with other actors with potentially diverging interests.

In addition to the similarities between both frameworks, Strategic Analysis offers possibilities for extending the path-dependence framework. First, this theory presents an interesting explanation about variations in organizational processes across local settings within a given organizational field, and thus helps account for potential divergences across these settings (Musselin, 2005: 67–68). Second, it focuses on concrete actors' strategies and power relationships according to the opportunities and constraints created by a specific context and better accounts for the definition and implementation of reforms in concrete social settings. Last, strategic analysis takes the influence of systems effects on the organization into account. These effects are defined as the “consequences, anticipated or not, which are produced by the intervention of an actor in a situation involving other actors and which take the form of a significant modification of the structure of relations among these actors, or the individual strategies or collective games they pursue” (Dupuy and Thoenig, 1979: 16). In doing this, this framework also provides an interesting explanation of the consequences of change, since it analyzes the implementation of reforms and their impacts on organizational processes (Dupuy and Thoenig, 1979: 2). Based on strategic analysis, this project aims to explore these three ways of extending organizational path dependence by answering the following questions:

- *How can we account for a variety of changes in locally organized systems inside a field marked by a strong continuity?*

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<sup>2</sup> In this study, I will use the terms positive-feedback mechanisms, self-reinforcing mechanisms and increasing returns interchangeably while preferring the concept of positive-feedback mechanisms.



- *What role do actors' interdependence and strategies play in bringing about or struggling against a change in path-dependent processes?*
- *What are the consequences, in terms of systems effects, of deviating from the established path?*

## **Research design**

To answer these questions, I rely on a qualitative comparative case study design. The qualitative nature of this research is justified by its focus on the nature of the reforms in organizations embedded in a specific context. The study aims to explore a variety of changes across different settings and not to analyze the frequency of these change processes in a whole sector. Studying how changes may unfold differently across several organizations can be best carried out through a multiple case study design. This study design is best suited to achieve the objectives of the research — that is, explaining how and why organizational changes differ across settings in a field marked by strong continuity. In addition, a case study strategy is well suited for the analysis of phenomena in their real-life contexts and for unraveling complex causal relationships. Furthermore, the decision to choose multiple cases instead of a single case was made for the purpose of analyzing these causal relationships “across a larger population of cases” (Gerring, 2007: 86). Finally, a multiple case study was necessary in order to compare various outcomes studied in each specific context and to explain the reasons for these divergences.

This study is based on a comparison of German water utilities and their development since the 1990s. The German water sector<sup>3</sup> represents a field that is marked by a fascinating contrast between a strong continuity at the aggregate level (path dependence) and various cases of organizational change among its local water utilities (varieties of change). Despite recent pressures to change, the organization of water services in Germany has been characterized by strong continuity and homeostatic properties for two reasons: the specificity of the sector and the national context. Due to the high fixed costs of its infrastructure and the low returns on

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<sup>3</sup> Muller (2005: 181) defines a sector as the vertical structuration of social roles with specific values of functioning, norms of elaborations, elite selection and border delimitation. It is also a configuration of actors in cooperation and conflicts, whose relationships draw on a cognitive and normative framework delimiting therefore the object and contents of the public policy.

investment, as well as important political and juridical constraints, fundamental changes in the organization of water services have remained very difficult to bring about. Even though water services — in contrast to energy, telecommunication or public transportation sectors — have not been liberalized at the European level yet, the European Commission, which aims to homogenize the organization of these services within its internal market, has been attempting to exert pressures to enforce international calls for tender and open this sector to competition. In Germany, competitive pressures were even stronger because of German Reunification, which gave private water operators the opportunity to get a toehold in this sector. However, the German water sector has remained fragmented, with monopolies (*Gebietsmonopole*) under the control of the local governments and the jurisdiction of the *Länder*. Still protected from liberalization, it is a reliable source of revenue for municipal authorities and a strong instrument for balancing out the deficits created by public transportation. This position is reinforced by the Article 28 (2) first sentence of the German Constitution, which guarantees the institutional principle of municipal self-administration.

Furthermore, the water sector is governed by a particularly great number of actors with diverging interests and diffused power<sup>4</sup>. The sector is therefore well suited for analyzing the influence of actors' strategies on organizational continuity and change (strategic collective action). As is the case with other essential goods such as energy or housing, water is not only a basic resource necessary for life but also has an economic value and therefore an important impact on individuals as well as businesses. As a consequence, any variation in prices and quality may damage actors' interests and push them, depending on the context, to influence water policy. In contrast to many essential goods, however, water is strongly linked to public health issues. In addition, consumers cannot rely on a cheaper alternative. It also has a political value for decision-makers, whose legitimacy may depend upon problems in water services. In Germany, water services generally take the form of a municipal integrated utility and are therefore strongly interdependent with other sectors, such as energy, transportation, or heating. Hence, additional actors from these other sectors

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<sup>4</sup> Governance refers to the regulatory framework influencing actors' interactions in bringing a specific policy outcome. It also focuses on the influence of non-state actors, private actors as well as third sector actors (voluntary and non-profit actors), in the public policy process (Stoker, 1998: 18) and is therefore intimately linked with the notion of change in actors' constellation and their interdependencies.

may also be involved in the water policy process. As Germany is a federal State, its water policy-making is divided between various levels of governments, where municipalities and their local governments play a central role. All these characteristics make the German water sector a suitable field for studying local actors' various strategies as well as the governance of path-dependent processes more carefully. Overall, the German water sector provides an ideal opportunity to demonstrate that even a field overtly governed by path continuity reveals upon closer inspection that organizational continuity and discontinuity are dependent on the contingent games of actors within a variety of systems.

Since governing water services is a prerogative of municipal authorities, the organization and management of water utilities may vary from one city to the other. Hence, in looking more closely at the local organization of this sector, various deviations from — and even ruptures with — the established model of water management can be observed<sup>5</sup>. A general distinction is made between adaptive change and disruptive change or rupture. While the first changes aim to maintain or reinforce the general characteristics of German water services, ruptures — defined as the consequent modification of the shareholder's structure following an international call for tender — imply a move toward a market-oriented logic and profit-oriented behavior. It is characterized by the belief that the introduction of a “competition for the market”<sup>6</sup> (Schwarze, 2001; Bogumil and Holtkamp, 2002; Wackerbauer, 2009b) would improve the management of water services by selecting the most efficient partner. Taking the distinction between various degrees of change into account, this case study is based on a theoretical sampling that enables me to study a variety of changes at the local level. I compare three German water utilities that reveal contrasting organizational developments and present various degrees of change. These three German water utilities include a case where continuity prevails and with only minimal changes in management practices — called path maintenance — a case with incremental change and characterized by the introduction of a new shareholder

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<sup>5</sup> Lorrain (2005a: 237) defined a model of urban services on the basis of three features: the institutional architecture, which relates to the division of labor, the policy principles, that is, all the techniques enabling the model to work, and finally, the rational construction, i.e., the specific culture or mentalities.

<sup>6</sup> As a natural monopoly, competition between firms in the water sector does not take place at the level of the final consumer; competition takes place between the local authorities and the firms for obtaining a temporally limited right—through a concession contract for instance—to manage partially or completely, this service. In this case, the monopoly remains and the final consumer has no real choice between different providers.

without real influence on the water management — called path inflection — and a case of more radical change leading to the introduction of new shareholders with a real influence on water management — called path breaking.

Three cases representing contrasting organizational processes in German water management were selected. In the case of Leipzig (path maintenance), the water utility has been kept in public hands and its strategy has remained mainly focused on its local-level public service mission. Only minimal modifications in the management practices and organization structure were carried out in order to maintain the path and secure the dominant position of the actors governing water services. In the middle of the 2000s, an international call for tender was planned, but aborted following the intervention of local actors. In Frankfurt (path inflection), a reform resulted in the integration of the gas services into the utility. Several actors supported an international bid, but this project did not receive a widespread endorsement within the city council. Even though a private actor became a shareholder in the utility through the merger, the municipality maintained control over the utility. The cooperation enabled the utility to increase its competitiveness at the local and regional level. In Berlin (path breaking), an international call for tender was implemented and led to a partnership with private multinational companies. In a context of municipal financial pressures, large infrastructural investment needs and a municipal utility in deficit, this project was aimed at avoiding bankruptcy. In this case, the local government had to partially relinquish its control over local water services.

In this study, the local organization of urban services is defined as a system, made up of various interrelated sub-systems including water distribution, and depending on the cases, water sanitation, electricity, and gas distribution, and public transportation. This system is made up of several actors (municipal utilities, city council, municipal administration, trade unions, local businesses, environmental organizations, etc....) involved in the urban policy process and that may have an influence on it. These actors generally share a common understating of how these services have to be managed. They are also subject to common regulation, which coordinates their action and relationships. In this system, actors also share common goals: securing cheap and high quality services for the local community, and generating profit for the municipality in managing these services. This system also

has physical boundaries since it relies on the local distribution network. It is defined as an open system as it regularly exchanges resources and information with its environment (Katz and Kahn, 1966). This environment is made up of elements that influence the regulation of the systems, that is, the upper levels of government (States, Federal State), and European institutions. The environment is also defined by actors that have not been historically involved in the local policy process and the management of urban services.

## **Theoretical contributions**

The overall contribution of this thesis is to show that a path-dependent process needs to be conceived of as a complex multi-step process involving heterogeneous actors with divergent interests and producing potential systems effects. Relying on a clinical analysis, this study specifically makes two major contributions to path-dependence theory.

The study contributes to moving away from an overly linear and segmented perspective on path-dependent processes, where the stages of organizational stability and change are clearly differentiated (a stage of contingency, which is followed by a stage of lock-in, which in turn may result in change in the event of exogenous shock), and the factors driving the process are clearly identified (mechanisms and external shocks). I argue here that the complex relationships between the different stages of a path-dependent process need to be more closely investigated. First, the thesis goes beyond the observations of continuity in the German water sector and sheds light on the dialectical relationships between stability and change in local water systems, as well as on the tensions between the continuity of the sector and the various changes at the local level. In this thesis, path change is defined as a broader concept that captures the various degrees of organizational change at the local level. An organizational path is characterized by the public control, generally exerted by local authorities, over the water utility. By showing that path change may unfold differently in various local settings within a field marked by high continuity, this perspective provides a much more complete and integrated framework for analyzing continuity and change in organized systems. Second, it points out that change processes may unfold at different paces depending on the cases. Attempts to change

may be aborted at different stages of the process and also have different implications for the path depending on the emergence of systems effects. Hence, it demonstrates that organizational continuity and discontinuity may coexist within the same organized system. These tensions between organizational stability and change may even be the drivers of path development. Continuity in several organizational patterns may be a prerequisite for bringing about change in the organized system and discontinuity in organizations may be essential for maintaining the system.

This complex process involves a great number of heterogeneous actors with diverging interests and strategies. By focusing on specific actors' interests and strategies in pushing for or struggling against a reform of water services, this study contributes to a better understanding of strategic collective action in path-dependent processes. Based on an actor-centered perspective on path dependence, it aims to show that path change, defined as the tension between organizational stability and change, is mainly the product of endogenous dynamics characterized by interrelationships between local administrative and political actors within a system. Therefore, change is not only triggered by external shocks but is also the outcome of political struggle and power relationships that take place between actors with heterogeneous interests inside the system. External pressures may act as facilitating conditions for bringing about change but they are not exclusively the triggers of change. The clinical analysis conducted in this study provides empirical evidence for the existence of concrete strategies deployed by actors during the process. For instance, pressures to change may be instrumentalized by actors in order to frame a situation as being one of crisis and to provide a new direction for further development. In addition, actors pushing for change may need to strategically combine old organizational patterns with new ones in order to bring about a reform of the system. By emphasizing the role of actors' strategies and power relationships in defining and implementing a reform, this thesis shows that a path change requires not only the intervention of powerful entrepreneurs but also the modification of interdependencies between the central actors of the system. Finally, the thesis demonstrates that an understanding of distributed agency based on conflicts between actors is necessary in order to analyze the tensions between stability and change in organizations.

## **Structure of the thesis**

Following the introduction, Chapter 2 sets out the theoretical background to this study. I first explain some limitations of the path-dependence framework and argue for the necessity of studying the role of strategic agency in bringing about organizational change in path-dependent processes. Then, I introduce the strategic analysis framework, and point out several similarities with the path-dependence perspective. Following this, I discuss how this perspective may contribute to explaining path change under an actor-centered perspective.

Chapter 3 presents the methodology used to carry out the research. I begin by presenting the study design I selected based on the conclusions of my theoretical discussion. I then justify the choice of the field and the selected cases. I show that the German water sector is well suited for studying a variety of local organizational changes in a field where a strong continuity prevailed despite pressures to change. Following this, I present the various data collected (document analysis and 37 interviews with various stakeholders) and the various steps of the analysis. Finally, I discuss the general quality of the study.

Chapters 4 and 5 contextualize my case study. Chapter 4, which is based on path-dependence theory, accounts for the creation and persistence of patterns of regulation and governance in the German water sector. I report on the creation, the specific properties and the functional logic of this sector, and examine the influence of path-dependent mechanisms on the structuration of the German water sector. Chapter 5 focuses on the recent development of the German water sector. It describes the pressures to change exerted on the sector in order to open it up to competition and describes the political debates around reforming of the water sector at the national level.

In Chapter 6, I examine diverging local development processes of water services in three German municipalities, as evidences for different path developments across local settings. Based on the data collected during the research, I provide a “thick description” (Geertz, 1973) of my cases. I describe the profiles of the three water utilities studied and their organizational development since the 1990s. After that, I present empirical evidence of the mechanisms driving stability in my

local cases, focus on the concrete strategies developed by actors in order to reform water services, and account for the consequences of such reforms.

In Chapter 7, I compare my three case studies using to the analytical concepts developed in the theoretical chapter and attempt to identify common factors that have led to continuity and change across local settings. The purpose of this chapter is to bring together the central concepts of this study — mechanisms, actors' strategies and system effects — in a more integrated discussion on organizational stability and change, and to explain whether they help to account for variations in path development across similar local contexts.

Chapter 8 concludes the thesis by discussing the theoretical findings and the main contributions of the study. I begin by debating the concepts of stability and change in the path-dependent literature and the central role of actors' strategies in governing the process. I conclude this theoretical discussion by highlighting the benefits of analyzing path-dependent processes in a dialectic perspective. Finally, I discuss the limitations of the thesis and recommendations for further research.



## **Chapter 2: Theoretical background**

This chapter lays out the central theoretical frameworks of the study. I first present path-dependence theory, and discuss its scope and limitations. I then argue that while path dependence has proved to be an insightful way of looking at the emergence and persistence of organizational patterns, the crucial role of strategic collective action in bringing about or struggling against change in an organized system still needs to be examined more closely. To fill this gap, a second theoretical approach is introduced: the strategic analysis framework. I subsequently compare the two theories and argue how path dependence can learn from strategic analysis. Finally, I describe the theoretical framework of this research, which focuses on path-dependent mechanisms, actors' strategies, and system effects.

### **Path dependence: a classical perspective**

#### *From technological to organizational path dependence*

Since David's seminal article (1985), which analyzed the creation of the QWERTY keyboard, the concept of path dependence has enjoyed widespread popularity among social sciences (for a literature review, see Beyer, 2010). The basic rationale behind this concept is that “history matters”. In his paper, David argued that “historical accidents” have to be taken into consideration in economic analysis (1985: 332). By showing that the invisible forces of the market were not always sufficient to explain the standardization of a technology, David aimed to move away from the neo-classical view of economics. He traced the standardization process of the technical solution QWERTY, which became dominant despite the emergence of potentially more efficient alternatives — for instance the DVORAK keyboard which apparently enabled users to type 40% more quickly than the QWERTY. This

situation, which is defined by David as a lock-in, is the product of several mechanisms: strong technical interrelatedness, economies of scale, and irreversibility of investments. Brian Arthur formalized the assumptions made by David through a non-linear stochastic model. Comparing two competing technologies, A and B, Arthur demonstrated that in a situation of increasing returns (which is compared in his model to the situations of constant and decreasing returns), the adoption of the inefficient solution might happen and result in a situation of lock-in. This process is determined by a “small-event history,” which is “outside the ex-ante knowledge of observers” (Arthur, 1989: 122) and which determines the adoption of the dominant technology in the beginning. Under increasing returns, the more a complex technology is adopted, the more experience it will generate, and the more it will be improved (Arthur, 1989: 116). While both studies have enjoyed great popularity, the conception of path dependence was strongly criticized. Taking the QWERTY's example, Liebowitz and Margolis for instance, attacked the concept of a path at the methodological and the theoretical level (1990). In an analysis of the video recorder format, they demonstrated the existence of three different forms of path dependence. For them, the first two forms were common cases in economics but did not imply market errors, while the third form, which implies market errors, was too rare and unrealistic (Liebowitz and Margolis, 1995).

Following the initial developments in the field of technology, path-dependence analysis was expanded to institutions, organizations, and strategies. In the field of economic institutions, North (1990) used the concept to explain why societies with poor economic systems persist over time. To him, increasing returns were not the sole factors explaining institutional stability over time. The influence of necessarily limited human rationality and high transaction costs were also factors explaining the creation and persistence of institutions. He also argued that path dependence cannot simply be analyzed in terms of historical events. “Path dependence is a way to narrow conceptually the choice set and link decision-making through time. It is not a story of inevitability in which the past neatly predicts the future” (North, 1990: 99). Finally, North conceived of a path-dependent process as driven by gradual change and not by the identical reproduction of one pattern. Institutional path dependence was also broadly discussed by authors in other social sciences, such as political sciences and sociology. These authors left behind the

discussion of efficiencies and market failure and concentrated more on political processes. This led them to focus on other mechanisms of stability, such as norms, power or legitimacy. The contribution of Mahoney to the path-dependence analysis is threefold. First, he enlarged the range of potential explanations for institutional reproduction. To him, path dependence can be explained through utilitarian, functional, power-based, or legitimacy-based explanations (Mahoney, 2000: 517). Second, he drew a distinction between self-reinforcement and reactive sequences, which states “each event within the sequence is in part a reaction to temporally antecedent events” (509). Lastly, while Mahoney examined mechanisms underlying path reproduction, he also analyzed mechanisms that may result in path change. Pierson analyzed path dependence and its increasing returns in political processes. Arguing that path dependence is even more relevant in the field of non-economic systems, because there is no market pressure to change, Pierson added new factors explaining institutional reproduction. He thus focused on collective action, density of institutions, power and complexity (Pierson, 2000). To summarize, the expansion of the path-dependence concept through its transposition to institutions took two main directions. Firstly, they moved away from a conception of path-dependence as a stable process and enlarged path-dependence analysis to include change processes. Second, an institutional view of path-dependence contributed to enlarging the range of factors driving the reproduction of the path.

The most recent developments in the theory have dealt with path-dependent processes in and between organizations, as well as in strategic processes. Scholars examined the existence and persistence of patterns at the level of organizational structures (Bebchuk and Roe, 1999) or strategic decisions (Gilbert, 2005; Koch, 2008). Other studies more recently concentrated on a formalization of organizational path dependence, in order to move away from a loose and ambiguous use of the concept; these studies have developed a three stages model explaining the constitution of path-dependent processes (Sydow et al., 2009; Schreyögg and Sydow, 2009). Compared to scholars studying the institutional perspective, scholars of organizational path-dependence returned to a more restricted definition of the concept that more closely resembles the first economic approach to path dependence. First, authors focused on the efficiency issue. Second, their mechanism explanation was mainly based on increasing returns such as learning, complementarities and

coordination effects, as well as adaptive expectations, which was originally developed in the literature in economics. Last, they have developed a strong conception of lock-in, where actors are trapped into a specific course of action and have lost their leeway to shape the path.

*Key concepts of path-dependence analysis*

Path dependence is defined as a process — that is, “a sequence of individual and collective events, actions, and activities unfolding over time in context” (Pettigrew, 1997: 338). This process of path dependence is characterized by four interrelated concepts: contingency, lock-in, critical juncture, and self-reinforcing mechanisms.

A path-dependent process is marked by non-ergodicity, which means that several options are possible during the first stage of the process and that history will select among these options (Ackermann, 2001: 11). Hence, historical events lead to the emergence of a specific course of action. In the beginning, the process is relatively flexible and defined by very weak initial conditions (Vergnes and Durand, 2010). In this stage, called a period of contingency, historical developments are open and future outcomes of interests are unpredictable. When several choices are available, the selected alternative is influenced by a "small event" — that is, an event occurring randomly and whose consequences cannot be identified ex-ante. Actors are not able to predict the occurrence of an historical event, which will influence the adoption of a specific course of action. By demonstrating that among several alternatives the best will not necessarily be chosen, the concept of path dependence contrasts with the neoclassical view of economics, in which actors always select the efficient alternative and are fully rational.

In contrast to the first stage of the process, the last phase is defined as a situation called lock-in. A lock-in means that actors are trapped into a potential “sub-optimal” solution since the range of alternative courses of action progressively decreased, forcing these very actors to rely on a dominant arrangement. Lock-in situations may have various origins, i.e., cognitive, emotional, social or based on resources. Depending on the nature of the lock-in (Unruh, 2002: 318), the path may be more or less easy to break (Sydow et al., 2005: 25). This “lock-in” phase has been broadly debated in the field of institutions and organizations for two reasons. First,

inside social systems, actors can always rely on alternative courses of action, so they cannot be fully locked-in — as the theory claims. As a matter of fact, this conception of lock-in initially discussed in the literature on economics has to be adapted for the study of organizations and institutions since they are complex social settings (Schreyögg and Sydow, 2009: 7). A second critique of the lock-in situation is linked with its potential inefficiency, which was widely debated in the literature on path dependence. In the field of economics, efficiency has been pushed to the forefront and considered a crucial issue because it questions the capacity of the markets to select products (Liebowitz and Margolis, 1995). The question of the inefficiency of a lock-in also played a central role in the debates on institutional and organizational path dependence (North, 1990; Pierson, 2000: 253; Sydow et al., 2009: 691). For other scholars, however, studies in political science, especially in the field of public policy, should focus on why intentional reforms may fail to bring expected changes since “the absence of a common standard for measuring and comparing outcomes in politics problematizes the very idea of optimal solutions” (Torfing, 2009: 75).

During path-dependence processes, critical junctures occur as a transition between the stage of contingency and the stage of lock-in. Generally, critical junctures are defined “as a significant period of change, which typically occurs in distinct ways in different countries (or other unit of analysis) and which is hypothesized to produce distinct legacies” (Collier and Collier, 1991: 29). In the course of a path development, this stage corresponds to a period of institutional fluidity, where path-dependent effects are weaker, consequently leaving actors with more leeway. During this period, “there is a substantially heightened probability that agents’ choices will affect the outcome of interest” (Capoccia and Kelemen, 2007: 348). Alternative courses of action emerge and enable actors to switch to another path or remain on the old one. Studying critical junctures enables researchers to analyze how these alternatives emerge and how actors influence the various courses of action (Botzem and Mante, 2008: 9; Crouch and Farrell, 2004: 20). The idea that critical junctures may have different effects in different places and at different times — and therefore lead — to differing outcomes supports the idea of a variety of path developments depending on the pressures to change and the nature of local constellation of actors (Avdagic, 2006). However, the concept of critical junctures is also intimately related to the idea of punctuated equilibrium, which in turn has two

consequences for the conception of a path-dependent process: First, paths are characterized by long persistence during which actors remain locked-in; second change is possible in a period of fluidity caused by external shocks.

Self-reinforcing mechanisms represent the core concept of the path-dependence framework. As the main drivers of the process, they contribute step by step to reducing actors' scope of action and driving them into the stage of lock-in. Although there is a great variety of definitions of social mechanisms in the social sciences (Gerring, 2010: 1501; Hedström and Ylikoski, 2010: 51), they are generally conceived of as relational concepts (Mahoney, 2001: 578), which explain how things work — that is, “how actors relate, how individuals come to believe what they do or draw from past experiences, how policies or institutions either endure or change, how inefficient outcomes become harder to reverse, etc.” (Falleti and Lynch, 2009: 1147). They are “sequences of causally linked events that occur repeatedly in reality if certain conditions are given” (Mayntz, 2004: 241). In the literature on path dependence, several mechanisms are taken into account (see table 1). The literature on economics classifies the main mechanisms as followed: high fixed costs, learning effects, adaptive expectations, and coordination effects (Arthur, 1994: 112). Scholars in the field of political science have broadened the mechanisms' category to include power, conformity or legitimacy (Beyer 2010: 9). Despite the great interests in a mechanism-based explanation of path-dependent processes, scholars have generally made no analytical distinction between the varying natures of the mechanisms underlying path-dependent processes—such as for instance positive feedback or increasing returns (Bennett and Elman, 2006: 259; Page, 2006: 88).

Mechanisms category	Definition
Coordination effects	Rule-guided behavior and shared understandings that make cooperation between various categories of actors more consistent (Becker, 2004)
Complementarities	Synergies, economies of scope, resulting from the integration of interrelated organizational tasks, which mutually reinforce each other.  The adoption of a set of rules reinforces the necessity to adopt other rules and contributes to the formation of an institutional coherence.
Investment spirals	Large set-up investments associated with the development of a specific know-how and a particular logic leads to further investments in line with this very logic and the previously constituted know-how.
Learning effects	“The more often an operation is performed, the more efficiency will be achieved when operating subsequent iterations” (Schreyögg and Sydow, 2011: 325)
Adaptive expectations	“The more people are expected to prefer a particular product or service (and not another one), the more attractive it becomes” (Schreyögg and Sydow, 2011: 325)

**Table 1 : Mechanisms structuring a path-dependent process**

*The limits of the classical perspective*

Despite its growing popularity, many scholars have criticized the classical perspective on path dependence. Two of the major criticisms were that the theory was too deterministic (Deeg, 2005; Streeck and Thelen, 2005; Kay, 2005; Peters et al., 2005; Djelic and Quack, 2007), and that it has not provided a satisfactory conception of agency (Botzem, 2010; Garud et al., 2010; Sydow et al., 2010; Sydow et al., 2012). In the classical path-dependence perspective, the processes are generally conceived as a natural entity that unfolds independently of actors' intervention. Hence, this view of path dependence refers to the assumption that the process has a concrete and real existence. Scholars generally tend to reify the path, to grant it an objective and independent existence, and consequently to neglect the fact that it is the product of human construction (Berger and Luckmann, 1966). Moreover, the dominant perspective on path dependence embraces an "outsider's ontology i.e. a de-contextualized comparative approach to viewing and evaluating phenomena" (Garud et al., 2010: 761). An ontology of this nature tends to consider social facts as value-free and *suis generis*, and analyzes them with a certain distance (Morgan, 1980: 608). The view of path dependence as deterministic and reified refers to a functionalist perspective where actors are influenced by mechanisms

acting as external constraints and where behaviors are shaped by systems (Astley and Van de Ven, 1983: 248).

As a consequence, the classical view of path dependence implies an overly linear and sequential analysis of the process, in which change and stability are generally opposed to each other and actors are trapped by the effects of mechanisms. By overemphasizing stability, scholars on path dependence have therefore left out the analysis of path change (Peters et al., 2005). As Kay (2005: 565) put it, “at the heart of any account of path dependency is stability: observations of change challenge the notion”. For the classical approach to path dependence, path-dependent regimes logically exclude path-breaking changes from inside the path, since actors, who are locked in, are not able to escape alone the process in which they are trapped. “The idea of deliberately breaking a path is self-contradicting in a way” (Sydow et al., 2009: 702). Scholars on path dependence generally posit that external shocks are the only source of change and therefore exclude any endogenous explanations for breaking the path (North, 1990; Pierson, 2000; Schneiberg, 2007; Sydow et al: 2009; Vergne and Durand, 2010). Schreyögg et al (2003: 278), who draw a distinction between unintended path dissolution and an intended path breaking, argued that in the case of path breaking the source of change could only be the product of an outside intervention.

According to this perspective, change may only be caused by external shocks because endogenous dynamics are driven by self-reinforcing mechanisms that result in high stability levels. To several authors however, a mechanistic understanding of organization is often based on simple causal relationships that would reduce the complexity and ambiguity of the analysis and “create a reductionist, machine like view of organization” (Weber, 2006: 120). This mechanistic explanation of stability developed within the classical perspective on path dependence may be useful in developing models capable of prediction. However an overly formal interpretation of mechanisms may result in the exclusion of the role of actors in driving the process, as well as the influence of the context during path-dependent processes (Bunge, 1997: 416; Falletti and Lynch, 2009: 1144). To Gross (2009), social mechanisms cannot be conceived of without social action and the context in which it unfolds. Hence, the drawing of a distinction between various kinds of mechanisms — the “natural world” and “human world” (Benton, 1998), or “substantive” and “formal”



(Gross, 2009) — enables scholars to study two key aspects of these mechanisms. First, it allows us to study the influence of abstract mechanisms in the genesis of a system regardless of the context in which they operate and their variation. Second, it allows us to study the concrete effects of these mechanisms within the various contexts (Diewald and Faist, 2011). Depending on the context, mechanisms may have various effects and be intertwined with other mechanisms (Astbury and Leeuw, 2010: 369). The context also influences the definition of the available alternatives and consequently the way the organization is strategically locked-in (Koch, 2011: 356).

This overly mechanistic view of the process, where change only seems possible through external intervention stems from the lack of an agency perspective in studies on path dependence. Actors governed by a path dependence process are trapped into a specific course of action, despite potential alternatives. They are constrained by forces that they theoretically cannot influence. This conceptualization of stability and change seems, at first sight, to be closely related to the paradox of embedded agency discussed over the last two decades in the institutionalism literature (Holm, 1995; Seo and Creed, 2002; Battilana, 2006; Lawrence et al., 2009). Scholars in the field of institutions have already tackled that problem and demonstrated that a change process is not only driven by external shocks but also needs the support of organizational elites (Fligstein, 1991). Other studies demonstrated that the emergence of a new path in an institutional system may occur without the influence of an exogenous shock (Schneiberg, 2007: 49), and that “endogenous institutional changes can arise through changes in actor goals and preferences” (Deeg, 2005: 33). Scholars in management have given few hints on how to explain change as the product of endogenous dynamics. For several authors “breaking can occur with the action of reflexive agents with sufficient resource endowments” (Sydow et al., 2005: 19). Furthermore, reallocations of resources as well as multiple relationships inside and outside the organizations also have an influence on the change potential (Sydow et al., 2005: 24). Another condition would be the emergence of at least one new alternative course of action, which has to be more efficient than the established one (Sydow et al., 2009: 702). However, this idea of the path as the product of actors’ interdependencies and strategies has remained

largely neglected in the literature on path dependence; external constraints have been considered as the only potential factor for explaining path-breaking change.

## **Path dependence: a social-constructivist perspective**

### *Presentation and scope of the perspective*

At the same time as the classical view of path dependence was developed, several scholars elaborated a more social-constructivist perspective on path dependence. This perspective was mainly used in order to study the creation and change of institutional arrangements or technological regimes. It is largely inspired by the interactionist literature and focuses on the role of actors in the process of creating new paths. In opposition to the classical view of path dependence, this perspective refers to an interpretive paradigm, in which “social reality does not exist in any concrete sense, but is the product of the subjective and inter-subjective experience of individuals” (Morgan, 1980: 608). According to this perspective, actors create, mold and sustain reality, which is in turn the product of competitive and conflicting interpretations. Collective bargaining, compromise making, and negotiations between actors, whose behavior is in turn influenced by norms, values, and specific interests, are of prime importance. In contrast to the functionalist perspective, an interpretive perspective studies social facts as “what people make of them” (Sorge, 2005b: 114). These facts are the product of the steady reinterpretation and struggle over the definition of reality made by actors. With its focus on social relationships between actors, the interactionist perspective puts agency back at the center of the analysis, without denying structures and institutions (Hallet et al., 2009: 488). Institutions are conceived of as being inhabited by individuals doing things together (Hallet and Ventresca, 2006). Actors are “knowledgeable” (Giddens, 1984), they are able to reflect on their own situation, they have skills and the power to bring about change or maintain the status quo.

In their study on path creation, Garud and Karnøe (2001) examined the creation of the post-it notes at 3M Corporation to discuss path-dependence at the organizational level. For them, path creation is the result of action of an entrepreneur to “escape lock-in” (Garud and Karnoe, 2001: 7). Through “mindful deviation” — that is, the ability to depart from the existing structures in which actors are embedded

— entrepreneurs can generate a momentum, making the emergence of a new path possible. In contrast to the classical view on path-dependence, this perspective focuses on processes deriving from a conception of agency that is distributed and emergent. To Garud et al. (2010: 769), initial conditions are constructed, mechanisms can be manipulated by agents, and lock-in is a temporary state of stability. As social constructs, mechanisms are strictly linked to the constellation of actors and to the meaning actors give to them. As Astbury & Leeuw (2010: 370) have demonstrated, human interpretations of social structures or events represent an important aspect of how mechanisms work in social life. Efficiency is also the product of judgments defined by a specific institutional framework (Lounsbury and Ventresca, 2003), and it is the result of a construction driven by actors' interests. In this perspective, a path is conceptualized as a social construct and not as an entity independent of human action. This perspective brings the dynamics of change and the role of agency in path-dependent processes to the fore and therefore tackles several problems inherent in the classical view of path dependence.

First, scholars working on a constructivist perspective on path dependence attempt to deal with the problem of external shocks as the only possible source of change. The idea that external shocks were the only factor in path-breaking was criticized for being both too rare and too radical (Deeg, 2001:7), and for being dubious in the case of open systems — that is, when organizations are not closed to their environment and subsystems and levels are highly interdependent (Crouch and Farrel, 2004: 26; Deeg, 2005: 31). As a consequence, various parameters of the system can be subject to change while others remain stable (Djelic and Quack, 2007: 167-168). This perspective therefore contributes to blurring the analytical distinction between what, precisely, is exogenous and endogenous. For instance, Cortell and Petersen (1999: 185) differentiated between internal and external pressures to change. Hence, the external shock hypothesis is valid above all in a world defined as a closed system.

Second, these studies have once again put agency at the center of their analyses. Botzem and Mante (2008: 6) looked at how actors with various interests shape path developments through recurring interactions. In this perspective, it is thus argued that "*neben die Effekte der Selbstverstärkung treten machtvolle Akteure mit Gestaltungspotential*" (Botzem, 2010: 226). Based on a case study of airline mergers,

Lamberg et al. demonstrated the importance of stakeholder dynamics in path-dependent processes during periods of organizational transition (Lamberg et al., 2008). Hence, actors are able to strategically shape the path-dependent process. They are not exclusively influenced by mechanisms working behind their backs, as suggested in classical path dependence theory (Garud et al., 2010: 769). According to this perspective on path dependence, mechanisms are above all the product of actors' ongoing interactions and shared interpretations. Deeg (2005) differentiated between various categories of actors with heterogeneous logic, goals, and interests, as well as specific strategies that may influence the path. He also attempted to depict the various actors' practices that could affect path trajectories. For instance, he showed that path dependence might be influenced by actors through cultivation — that is, the organization of coalitions in order to bring about change in the institutional arrangement (Deeg, 2001: 13). Botzem contributed to enlarging this set of practices by analyzing the influence of legitimation, exploitation, renewal and domination (Botzem, 2010: 221).

Third, scholars referred to embedded and distributed agency in order to account for the development of various technological paths across settings (Garud and Karnøe, 2003: 281). Since actors vary across settings and over time, paths stop evolving in the same direction. Through this perspective, it is therefore possible to move away from an overly unilinear conception of path-dependent processes. For Garud and Karnøe (2003: 277), path development entails a “distributed agency” — defined as human action involving different actors — which emerges through recurring interaction. This distributed agency is also “embedded in larger technological regimes, which consist not only of a set of opportunities but also of a structure of constraints in the form of established practice, supplier–user relationships and consumption patterns” (Kemp et al., 1988: 181–182). Hence, while actors are able to shape the path, structures may increasingly influence actors over time, so that they are not able to act completely freely. For Garud and Karnøe (2003: 278), this influence is defined as the “accumulation of artefacts, tools, practices, rules and knowledge.” Actors select, decide on and practically implement that which belongs to the organization or not. They enact the environment, which means they construct and respond to it according their own subjective definition of it. According to this perspective, actors “create the materials that become the constraints and

opportunities they face” (Weick, 1995: 31). Organization is created and maintained through “joint actions that are embedded in day-to-day interactions” (Weick, 2003: 190). Recently, studies also relied on a structuration perspective in order to bring agency back into path-dependence analysis (Sydow et al., 2010). These studies claimed that including structuration would bridge gaps that emerged in recent debates on path dependence by combining the structural approach, which emphasizes the constraints exerted on actors, and the agency approach, which underscores the leeway of the actors involved in the process.

*The limits of the perspective and central problems of the thesis*

While these studies have paved the way for a fruitful research agenda that integrates agency in path dependence, several blind spots need to be further investigated. First, organizational changes in path-dependent processes have not yet been the subject of any detailed theoretical discussion and empirical examination (Dobusch, 2008: 143). Even if the concept has been studied within the broader frameworks of path generation (Djelic and Quack, 2007) and path constitution (Sydow et al., 2012), it has remained insufficiently explored in studies dealing with organizational path dependence. Scholars on institutional path dependence have previously worked on identifying various changes in path-dependent processes. Ebbinghaus (2005: 17) for instance distinguished between path stabilization, where a marginal adaptation takes place, path departure, characterized by an incremental change, and path cessation, where a path ends and a new one starts. Other authors focused on the differences between on-path change, which means a change within the institutional path, and off-path change, which means moving away to another institutional path (Thelen, 1999; Schneiberg, 2005). Streeck and Thelen (2005: 32) distinguished between various modes of change, namely displacement, layering, drift, conversion, and exhaustion. Essentially drawing on the literature on varieties of capitalism or national business systems, these studies exclusively focused on the national level of analysis, which was considered to be homogeneous and harmonious. As a matter of fact, analyzing the emergence of various organizational changes in path-dependent processes across local settings is still lacking in the literature on path dependence. Depending on the level under scrutiny, the organizational structure, and the fundamental organizational strategy, enacting change may be more or less

difficult, it may require the mobilization of more resources, and it may have diverging consequences (Sorge, 2006: 177).

Second, scholars have neglected the power relationships actors are embedded in and the concrete strategies they deploy in bringing about or struggling against changes in path-dependent processes. However, important steps have recently been made in this direction (Botzem, 2008: 40; Sydow et al., 2012: 908). However, many studies focus on the influence of powerful entrepreneurs with enough resources to move away from the path or create a new one. The role of actors' interdependencies in conducting an organizational change has not yet been addressed. Researchers have also neglected the influence of actors' positions within the system and their variations (some of them become weaker or are excluded from the game, other attain more dominant positions) on the path over time and across concrete settings. Depending on the relations between actors, the problem at stake, and the context, the power distribution between actors may considerably vary, leading, therefore, to a path differentiation. Furthermore, while strategies were discussed in these studies, they referred more to general categories of continuity and change rather than concrete strategies defined and implemented by actors in a specific context. The variety of concrete strategies used by actors, as well as their timing and the way they rely on them in order to maintain or change the path (such as framing, coalition building) are still missing in the analysis of path-dependent processes. Hence, actors, their position in the system, their interrelationships and strategies matter not only in creating paths but also in maintaining, inflecting, or breaking them.

Third, scholars on organizational path dependence have neglected the consequences of bringing about change (Sydow et al., 2009: 702). Does path change mean discarding one path and moving to another? Does it mean coming back to a stage where contingency dominates and where random events may influence further path developments? Does change result in the emergence of a critical juncture, where actors struggle over new alternative courses of action? Scholars on path creation have acknowledged the fact that deviating from the path may lead to counter-reactions (Garud and Karnøe, 2003: 281). However, no real attention has been paid to the concrete implications of deviating from the path and to the nature of the expected and unexpected effects that such changes may trigger. Studies on actor-centered path-dependence analyzed the stage of path shaping and examined the joint

influence of actors and mechanisms during this phase (Botzem, 2010: 224), but did not analyze such dynamics following the phase of lock-in, during which actors are said to be trapped in the path. Overall, these analyses thus far lack compelling explanations about the the direction of change and its potential consequences.

Last, systematic and detailed multilevel analyses of path-dependent processes have remained an important blind spot in discussions on path dependence until recent years. As stated by David, the assumption of a multiplicity of stable equilibriums challenges the framework of path dependence, “especially when continuities and structures observed in the social world around us could suggest that there is only one [equilibrium]” (2007: 101). Kirchner (2008) developed an analytical framework to assess the interactions between technological, institutional and organizational path-dependence processes. In a paper on the semi-conductors industry, Sydow et al. (2010: 191) appealed for further detailed studies on the recursive interactions between organization, networks, and clusters. One aim of this thesis is to engage with the debates on multi-level path-dependence processes and to shed light on tensions between stability at the field level and changes across local organized systems.

## **The strategic analysis of collective action**

### *Introduction to strategic analysis*

To tackle the problems defined in the preceding section and examine in greater detail the role of strategic collective action in bringing about and struggling against organizational changes in organized systems, I suggest looking at the path-dependence framework from a strategic analysis perspective. Also called the Organizational Analysis framework, this program was developed during the 1970s by researchers of the *Centre de Sociologie des Organisations* in Paris under the direction of the sociologist Michel Crozier. This research program started with an analysis of the French bureaucracy. In different studies, Crozier demonstrated that bureaucracies are organizations characterized by rigid ways of functioning and incapacity to reform themselves. Taking stock of Merton’s analysis on bureaucracy, who studied displacement of goals in organizations (1940: 563), he developed the concept of vicious circles. To Crozier, vicious circles emerge when an excess of

formal rules within an organization produces uncertainties and leads some members to rely on informal power that in turn increases the need for formal rules. In this work, Crozier highlighted the incapacity of the French bureaucracy to adapt to changes in its environment other than by relying on its intrinsic properties, which in turn results in maintaining if not reinforcing the underlying problem of the organization (Crozier, 1963).

The fellows of the C.S.O. criticized Crozier's analysis for only concentrating on intra-organizational processes and for overemphasizing organizational rigidities. To them, Crozier's analysis had just focused on relationships between actors within the same organization and had neglected their relationships with actors outside the organizations. In addition, Crozier analyzed this bureaucratic phenomenon as conditioned by the broader cultural framework of French society. This cultural influence was also one of the reasons why the bureaucracy encountered difficulties in reforming its functioning. The consequence is that for Crozier, organizational change is only possible through the intervention of a reformer from outside — because actors within the organization had no interest in disrupting its functioning — or through a cultural revolution in the organization's environment (Lautmann, 1965: 350–353).

These criticisms gave rise to further studies analyzing collective strategic actions in an inter-organizational context. The concept of cross regulation developed by Crozier and Thoenig (1976) in their analysis of French public affairs highlighted the specific relationships between different actors with asymmetric resources (elected local politicians and state bureaucrats). Their analysis shifted from the organizational level to the level of organized systems and pointed out the existence of a collective game between the various organizations in addition to the specific game that was taking place within each organization (548)<sup>7</sup>. Inspired by the concept of co-optation, developed by Selznick (1949), the authors also focused on informal relationships between the actors of the system. These relationships take the form of mutual arrangements, adjustments of interests, and compromises, since each actor needs the other in order to carry out local public policy. In this case, cooptation between the

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<sup>7</sup> “For a system means regulation, integration, and homeostasis. To claim that an organization is part of a larger system is to require sociological proof that the system means more than the sum of its parts, and that there is a collective game which exists independently of the individual games played by each of the organizations” (Crozier and Thoenig, 1976: 548).



actors of an organized system is necessary in order to maintain the stability of the system. This model therefore put the mechanistic view of Crozier's bureaucracy into perspective by showing that relationships between actors in an organized field are an important factor for organizational flexibility. In another study, Dupuy and Thoenig (1979) took the concrete case of French public transportation and showed how a collective organized system was able to regulate itself when it was confronted with pressures from its environment. For them, this system was capable of "turning to its own advantage not only major development trends but reform tendencies as well" (Dupuy and Thoenig, 1979: 6). In addition to taking into account the effects of vicious circles as sources of organizational paralysis, this study contributed to showing that implementing change may result in the emergence of systems effects that may reinforce or maintain the strong interdependencies between actors within the system.

In parallel with these debates, which were essentially focused on the French national context, Crozier, together with Friedberg, formalized the theoretical framework for strategic analysis in their book called *The Actor and the System* (1977). Overall, the main purpose of this framework is to unravel the problems of cooperation between actors with contrasting logic, different competences, and conflicting solutions, within an organized system (Crozier, 1972: 240–241). It aims to understand endogeneization mechanisms, which allow heterogeneous actors or groups of actors to be integrated within a specific system, defined as a "relatively stable, coherent and multi-dimensional ensemble (that) exhibits homeostatic properties" (Crozier, 1972: 244). As Friedberg put it:

*"Its aim is the exploration and analysis of the institutional arrangements which make up the local order socially constructed by human beings in a given field of action in order to manage their interdependence and which must always be understood as being at the same time the product of social action and the constraints canalizing it through the creation of cognitive frames, of routines, of rules and power relations sustaining them" (Friedberg, 2000: 68).*

According to this perspective, organization analyses focus on "the process through which the strategic interaction among a set of actors placed in a given field of action and mutually dependent for the solution of some 'common problem', are stabilized and structured into local and contingent orders" (Crozier and Friedberg, 1995: 75).

The functioning of an organization is seen as the product of a political process where there is the need for an adjustment between various rationalities in conflict. Hence, human cooperation or transaction is not only the result of an economic game but also the product of a political game, in which actors seek to influence the rules structuring the game while cooperating with each other in order to remain in the game.

*Key concepts of strategic analysis*

This theory offers an alternative framework to Giddens's structuration perspective (1984) in order to analyze the reciprocal constitution of structure and action in and between organizations. In this perspective, actors are free to act strategically while constrained by the system in which they act and the structures that they collectively produce. In contrast to Giddens perspective however, the strategic analysis provides an inductive methodology for reconstructing the duality and recursivity of action and structure (Nolte, 1999: 96). Central concepts of the framework used to link structure and action are the actors, local orders, and system effects.

According to this perspective, actors as individuals or groups play a fundamental role. On the one hand, these actors are subject to a "bounded rationality" (Simon, 1957). This bounded rationality can take different forms — that is, instrumental (interest driven), axiological (value driven), and institutional (Musselin, 2005: 64). On the other hand, actors are also able to act strategically because they are not simple rule followers or "cultural dopes" (Garfinkel, 1967). They have a "strategic instinct", that is, they are not only acting under the influence of their own socialization but also according to the opportunities and the constraints of a specific context and reacting to the action of their partner-adversary (Friedberg, 1993: 220). Actors are defined as human beings who contribute to the structuration of the field of action (Crozier and Friedberg, 1995: 75). They actively participate in the definition of problems and the design of appropriate solutions, and therefore shape the organization in order to adapt to the environment. Depending on the problem and its interpretation, actors in organizations actively structure their environment by developing selected relationships with external actors. This conception of actors developed by strategic analysis enables researchers to study concrete actors as relevant empirical and human entities.

Actors' interactions and their resulting power play a crucial role in the strategic analysis of organizations. Crozier and Friedberg based their definition of power on the work of Dahl (1957). To them, power is a relational concept, that is, a product of interdependence between actors. Power is therefore defined as the ability actors have to impose their own interests during an interaction (Crozier and Friedberg, 1995: 82), and is largely dependent on their capacity to master uncertainty. Actors are in cooperation or in conflict with other actors depending on their interests. They are involved in a game with other actors. In this game, each actor brings solutions to a specific problem but inevitably runs up against other actors with heterogeneous interests who support other solutions to the same problem. Building on the work of Granovetter (1985), strategic analysis argues that it is necessary to study actors as embedded in an empirical system of interdependent relationships. Actors cooperate or struggle for the establishment of a specific institutional arrangement which is a construct and therefore never given (Maurice, 1994: 647). This concept of power thus provides a political perspective on cooperation between actors. For Crozier and Friedberg (1977), sources of power may have various origins: the possession of a specific competence, the relationship between the organization and its environment, the control of the internal communication, or the use of organizational rules.

Strategic analysis also takes into account the influence of structures, which are mediated through rules or routines. Rules provide an essential framework for actors' actions and interactions. Actors both have leeway and are constrained by the system, which is structured by regulation mechanisms (Crozier and Friedberg, 1977: 243). Although the system puts limits on actors' freedom, no social system is entirely regulated or controlled. Consequently, actors have a degree of independence that they can use strategically in their interactions with other actors (Crozier and Friedberg, 1977: 30). Actors and systems are linked by what the authors call a game. A game is a construct used by actors in order to structure and regularize their cooperation. The rules of the game ensure the stability of the sub-system and keep players in check, as they have to respect the rules if they want to remain in the game. Several games may co-exist at the same time; they may partially overlap with each other and an actor may belong to several games at the same time. Each actor attempts to modify the rules of the game in order to constrain the other actors and to enhance

their own freedom. While the game regulates the interactions between actors, it is also radically contingent. This means that it is “relatively autonomous inasmuch as it is also an emergent result of processes of interaction and the product of collective creation and learning” (Crozier and Friedberg, 1995: 79).

Another central point of this framework is the emphasis placed on the local, which can be defined “as a stage on which social order get(s) produced and a lens for understanding how particular forms of action are selected” (Fine, 2010: 355). Scholars of strategic analysis refuse to analyze society as completely homogenous, coherent and hierarchical, and to grant too much importance to macro-determinisms. As they focus on the “fragmentation of the social and institutional fabric of any society which it sees as made up of a multitude of partial regulations, the consistency, homogeneity and hierarchization of which are never complete” (Friedberg, 2000: 57) they are opposed to neo-institutionalism (Hall and Taylor, 1996) which generally posits a high homogeneity and continuity within an organizational field (Friedberg, 1998: 512). By contrast, “localism stands at the junction of the interactional and the institutional, escaping the traditional black-box that links micro- and macro- interpretations (Fine, 2010: 357). Strategic analysis scholars therefore concentrate “on the specific properties and logic of functioning of particular systems of action and the local, in the sense of partial, orders which sustain them” (Friedberg, 2000: 60). With this purpose in mind, they introduced the concept of local orders. These orders are partial and contingent entities independent of global regulations, which have developed their own logic of functioning. They are produced and sustained by concrete systems of action in which empirical actors interact and face concrete situations. On the one hand, actors construct these orders locally by relying on context-specific resources. On the other hand, these orders ensure the regulation of actors' behaviors and the cohesion of diverging interests and strategies in a concrete system of action (Friedberg, 1993: 187). These orders contribute to structuring the local interdependencies of actors and therefore partially act as a constraint upon them. This concept is very useful for analyzing the dialectic relationship between structure and agency and for shedding light on the conflicting and contingent rationalities of actors in the concrete system of action (Friedberg, 2000: 67). Through the analysis of local orders, it is possible to move away from the idea that the local is mechanically brought in line with global standards (Paradeise

and Thoenig, 2011) and to show that similar external pressures may cause divergent or contrasting effects depending on the local context (Molotch et al., 2000: 817).

According to strategic analysis, the system influences actors' behavior and strategies, and perpetuates itself through system effects. These effects are defined as the product of a structured field made up of various elements that have coordinated interdependent behaviors. They emerge because of the complexity of the system in which various interdependent parts interact. These effects are the product of the variance between the intentional act of an individual and the sum total of individual interactions, which may create random outcomes (Masuch, 1985: 14). According to Friedberg, such effects are the "result of endogenous dynamics and feedback loops of a highly complex system of collective actors whose interaction continuously (re)produces the institutional arrangements which in turn construct the actors with whom concrete firms in a society have to structure their functioning" (Friedberg, 2000: 69). For Dupuy and Thoenig (1979: 16), system effects are defined as the "consequences, anticipated or not, which are produced by the intervention of an actor in a situation involving other actors and which take the form of a significant modification of the structure of relations among these actors, or the individual strategies or collective games they pursue" (Dupuy and Thoenig, 1979: 16). In their definition, the authors argue that an important outcome of these effects is that they modify the situation of interdependencies with other actors. These system effects, through which actors are organized in an action system, therefore determine the capacity of action of each actor involved in the system (Crozier and Friedberg, 1977: 397). According to Ashforth (1991: 467), such effects are most likely to emerge in regulated industries or public organizations, because of their "*dependence upon a number of relatively independent internal and/or external constituents*". Different categories of systems effects have been defined in the literature. Ashforth (1991: 460) differentiated between various systems effects: closed loops, dilemmas, and bureaucratic anomalies. To Langley (1995: 65), three system effects may lead to the paralysis of an organization. These three situations are labeled the "dialogue of the deaf," the "vicious circle," and the "decision vacuum." To Paradeise and Thoenig (2005), the more an organization works according to a bureaucratic logic the higher the likelihood that it will implement a reform without disrupting the vicious circles at the heart of the problem. Ashforth (1991: 462) gives the following example of a

vicious circle: a price rise carried out by a utility leads to a reduction in consumption, which in turn results in a new price increasing of the service. These effects have to be examined in specific local situations. They depend upon the concrete system under consideration, and therefore represent a concrete empirical problem.

*“Si tout mode d'action sociale semble bien toujours donner naissance à des conséquences inattendues, à des "effets pervers", qui, à terme, renforcent le besoin de recourir à ces mêmes modes d'action, si donc les dysfonctionnements organisationnels et les cercles vicieux qui en résultent semblent bien constituer des mécanismes et des processus universels, la localisation et les modalités précises de ceux-ci correspondent, elles, à un éventail de situations concrètes et relativement ouvertes et recouvrent, en fait, des modèles de jeux et de relations profondément différents.”<sup>8</sup> (Crozier and Friedberg, 1973, 200–201)*

System effects	Definition
Vicious circles	A solution to a problem maintains/aggravates the problem and contributes to the repetition of this very solution
Contradictory goals	Growing contradiction between the espoused and the manifest goals of the organization.
Conflict escalation	Growing conflict with or pressures from internal or external constituents of the system

**Table 2 : Some examples of system effects**

## **Comparing both frameworks**

### *Similarities and differences between path dependence and strategic analysis*

There are several similarities between the strategic analysis and path-dependence frameworks. First, Crozier’s early works on bureaucracy and the classical perspective on path dependence both share a similar view of organizational stability and change. They both concentrate on organizational rigidities and inertia. They both highlight the incapacity of organizations to adapt to their environment or enact any fundamental change in their intrinsic properties. They see systemic

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<sup>8</sup> "Every mode of social action may infallibly give rise to unanticipated consequences or "perverse effects", which in the long run reinforce the need to apply these very same modes of action. Organizational "dysfunctions" and the vicious circles which result from them seem, therefore, to be universal mechanisms and processes. Nevertheless, their precise local form and character depends upon a relatively open range of concrete situations; fundamental differences in types of game and models of relation may be masked" (Crozier and Friedberg, 1980: 99).

pressures as a constraint on individual autonomy and therefore have an overly deterministic interpretation of organizational functioning. While for path dependence this stability is defined as a lock-in situation that may have various origins, Crozier argues that the majority of actors involved in the game have no interest in changing the organization's functioning. To put it another way, in both frameworks actors are trapped either in a situation of lock-in or in a specific action system. Moreover, both theories define an organization as a closed system, which would only be able to change following the intervention of a powerful actor who is not locked-in or who has no interest in maintaining the rules of the game. Another reason that would lead to change would be the emergence of dramatic changes, like societal transformations, or the intervention of an external shock in the organization's external environment.

Another similarity can be found in the explanation of these rigidities. While both frameworks conduct a process analysis of organizations, the path-dependence analysis of organizational processes is divided in several stages and enables researchers to trace the emergence of organizational rigidities. Furthermore, path dependence emphasizes the decisive influence of self-reinforcing mechanisms or positive feedback during the stage of path formation. These mechanisms are the main drivers for organizational rigidities and the product of lock-in situations. In the early development of strategic analysis, organizational rigidities are analyzed as the product of vicious circles of bureaucracy. Formally, vicious circles can be defined as follows: "By trying to avoid undesired outcomes, human actors actually create these outcomes. And by continuing their activities, they continue to reproduce those undesired outcomes" (Masusch, 1985: 15). Vicious circles do not directly contribute to the failure of the action but reinforce or at least maintain the problem that was at the root of the action, and in turn may contribute to a repetition of this very action. Consequently, in a period of crisis, actors in an organization may bring about change in order to adapt to the environment without disrupting the vicious circles, which are in turn the source of the dysfunction of the organization (Paradeise and Thoenig, 2005). As is explained in the path-dependence framework, organizational rigidities may be the product of a reinforcing process caused by vicious circles. However, path dependence scholars identify the emergence of such mechanisms during the specific stage of path formation that follows a critical juncture. Moreover, in the path-dependence literature, mechanisms emerge during the phase of path formation

behind the backs of actors. In contrast, vicious circles usually emerge following the attempt of endogenous actors to reform a system. Thus, the mechanisms driving path-dependent processes seem to represent a more exogenous constraint than the vicious circles developed by Crozier. Due to their analysis of organizational rigidities through the influence of self-reinforcing mechanisms or vicious circles, both frameworks share an interpretation of the organization working as a machine. In both cases, these rigidities result in the adoption of a potentially sub-optimal solution. For Crozier, this dynamic leads to organizational dysfunction and to counterproductive results, while path dependence characterizes the situation of lock-in as being potentially inefficient.

Both frameworks have also had similar development paths. Recent studies building on strategic analysis have analyzed the organizational process as a social construct, just as studies adopting a social constructivist perspective on path dependence. For both approaches, organizations are not conceptualized as entities with a quasi-independent existence and which constrain action. They are instead seen as the results of ongoing actions and interactions between actors peopling the organization (Czarniawska, 2002), even though systems also influence their action. As a consequence, agency is brought back to the center of organizational analysis. According to strategic analysis, actors do indeed have a strategic instinct but they are at the same time constrained by their interdependencies with other actors with potentially diverging interests and by a regulative framework. Once constructed, the system develops its own defenses against reforms and therefore represents a significant barrier to change. For the social constructivist perspective on path dependence, actors remain trapped in a path they have actively constructed. They are able to shape mechanisms which in turn have a structuring influence on them. Both frameworks thus adopt a structuration perspective to explain the reciprocal constitution of structure and agency. On the one hand the strategic analysis “used the structuration theory (Giddens, 1986) before the fact, just like the *Bourgeois Gentilhomme* of Molière was reciting prose without knowing it” (Friedberg, 2000: 65). On the other hand, a large number of studies on path dependence have recently relied on this perspective to carry out their analysis of organizational paths (Dobusch, 2008; Sydow et al., 2010; Berthod, 2011; Sydow et al., 2012).



*A strategic analysis of organizational path-dependence and change*

In addition to the similarities between both frameworks, strategic analysis may offer possibilities for answering questions left open by the path-dependence framework. First, strategic analysis might present an interesting explanation of variations in organizational developments across local settings within the same organizational field, and might be interesting as a way to account for potential divergences of path dependent processes across these settings. Thus, Strategic Analysis differentiates between a system characterized by structural consistencies and regularities as well as relative coherence on the one hand, and by relatively autonomous local orders on the other. The former is defined as a framework governed by a common logic, prevailing regulation mechanisms and is characterized by a strong resistance to exogenous forces, while the latter refers to the great variety of local arrangements constructed by local actors within this framework (Musselin, 2005: 68). Hence, in this framework, a high continuity and homogeneity at the field level do not exclude the existence of a variety of local orders. Local orders may make it easier for the researcher to emphasize and explain the diversity of situations under scrutiny, without denying the existence of a partial coherence. This coherence is produced by a more global system configuration, which limits or frames actors' behaviors and perceptions without determining them. This perspective enables researchers to account for "the non-identical reproduction of its [organizational] structure and modes of regulation" (Friedberg, 2000: 65). Furthermore, a clear distinction is drawn between the specific logic dominating a whole sector, which is very resilient to change, and the concrete application of this logic in concrete system of action, which may evolve in a specific direction depending on the local constellation of actors (Musselin, 2005: 68). Hence, this division between a sector level, which is relatively stable, homogenous and coherent in regard to certain logics and parameters, and local orders, which are relatively autonomous, might be of great importance for explaining a variety of local developments despite a strong continuity at the field level.

In addition to this distinction, a clinical analysis of a path-dependent process might help researchers to shed light on a great range of path developments and various degrees of stability and change. Thus, a strategic analysis of path developments could show that the stage of lock-in in a path-dependent process is not

solely characterized by high stability and that the frontier between stability and change is not as clear as the literature on path dependence would suggest. Therefore, this theory could be helpful in developing a fine-grained and dialectical understanding — as well as a more realistic view — of organizational stability and change dynamics. On the one hand, path continuity does not necessarily imply a reproduction of the path over time in an identical way. Changes in organizational practices<sup>9</sup> may be necessary to maintain the organization's overall strategies. Organizations have adaptive capacities, which means that they are able to “alter processes and if required convert structural elements as response to experienced or expected changes in the societal or natural environment” (Pahl-Woslt, 2009: 355). On the other hand, organizational stability may be necessary for a reform of the organization itself. Moreover, a path breaking may be interpreted not just as the product of external shocks but may involve the action of actors, who seek to reform the system by introducing new games through the process of collective learning (Crozier and Friedberg, 1977: 395). According to this perspective, it is crucial to examine how actors fail to implement their reform attempts, how their program becomes deeply modified in order to fit with the system or even how efforts to reform the system finally contribute to preserving it (Torfing, 2009: 76–77).

Thirdly, strategic analysis may help us to focus on concrete actors' strategies and power relationships based on the opportunities and constraints created by a specific context, and thereby better account for the definition and implementation of reforms in concrete social settings. These strategies and interdependencies are crucial drivers of stability and change within the organized system. The recent literature on path dependence and path creation have already put agency back into the center of the analysis of path-dependent processes and looked at how powerful actors or entrepreneurs were able to shape new paths. They have also differentiated analytically between various groups of actors by relying on a proponent-opponent framework (Botzem and Mante, 2008). The strategic analysis framework might enable us to go further in the analysis of actors in two ways. First, this perspective would make it possible to shift from a study based on actors to a study based on interdependences between actors and to take into account the key role these actors

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<sup>9</sup> Organizational practices are defined as “particular ways of conducting organizational functions that have evolved over time under the influence of organization's history, people, interests, and actions that have become institutionalized in the organization”(Kostova, 1999: 309)

play in the system. In this framework, the interactions and the balance of power between actors is crucial for understanding the development of the organized system. Agency is fragmented between a great number of actors that are mutually dependent upon each other. Although distributed agency was already discussed in studies on path dependence, path dependence might profit from strategic analysis since it analyzes this distributed agency as the product of cooperation, conflicts, and relations of power. Second, this framework enables us to examine the concrete positions of actors in organized systems as well as their specific strategies and interests. Relying on a clinical analysis might be helpful to examine how a path is continuously debated, implemented, and evaluated by specific actors, and to study more closely their degree of involvement and the strategies they use during a reform in the organized system. While the proponents-opponents framework is of great value for analyzing the influence of actor constellations in shaping path-dependent processes, studying the strategies used by concrete actors depending on their position in the system may shed light on the conflicts that may arise between concrete actors within each group. In other words, a reform generally implies conflicts in and between various groups of reformers and groups of opponents. As argued by Castel and Friedberg (2010: 325), the success of a reform depends as much on its supporters as on its opponents.

Last, path-dependence theory might profit from strategic analysis as it can shed light on the consequences of path breaking change. Strategic analysis studies the actual consequences of reforming an organized system by relying on system effects. It thereby provides some conceptual keys for understanding not only change but also the consequences of change. According to the strategic analysis literature, a change would theoretically lead to the creation of a new game, with new interdependences, modes of regulations and a new rationality. Instead of exclusively focusing on external shocks, change is produced by a transformation of the action system — that is, a change in actors' interdependences and in the mode of regulation of these interdependences. Change means that the games structuring the system as well as the context of meaning are put into perspective. A system reform not only requires power struggles but also cognitive and relational capacities as well as a new government model (Crozier and Friedberg, 1977: 384). Any changes within the system generally result in the redistribution of power between the actors, a critical

evaluation of the new game, and new potential conflicts. This perspective might inform us about the consequences and direction of change attempts conducted by actors. Hence, depending on the nature of a reform, its implementation and its evaluation by local actors, the path would possibly take a specific direction. The nature of the system in question and the specific interdependencies between actors within the system are a prerequisite for understanding the system effects and in what direction the path has evolved. This perspective also brings to the fore the potential backlash between various phases of a policy process (Dupuy and Thoenig, 1979), and especially between the evaluation and the problem definition. By taking the emergence of system effects into account, the strategic analysis framework enables researchers to focus on the consequences that may arise when actors attempt to deviate from the path in which they are embedded. Each of these changes analyzed here imply various kinds of political reforms and result in different consequences.

## **Research focus**

Based on the insights of strategic analysis, the central argument of this thesis can be formulated as follows: a field that is at first sight ostensibly governed by path continuity is shown, upon closer inspection, to be dependent on the contingent games of actors within a variety of systems. I argue that a clinical analysis of the various systems can highlight a dialectic relationship between organizational stability and change that has so far been neglected by path-dependence analysis. To focus this analysis, this thesis thereby aims to analyze the heterogeneous character of path-dependent processes at the local level “without compromising the idea of a relatively coherent and stable path” (Torfing, 2009: 76) at the sectoral level. Change processes at the local level can take different forms. In several cases, only marginal changes in organizational practices need to be implemented in order to secure the stability of the whole system. Both the actors within the system and their dominant strategy remain stable over time. In other cases, actors from outside the system may be integrated into the system in addition to changes in practices. This implies a modification of the actors’ constellation — a modification that is, however, based on a rather broad consensus. In this case, these new actors do not deeply modify the existing interdependencies between the central actors of the system, whose overall strategy

remains unchanged. Finally, if new actors with heterogeneous strategies were integrated into the system and contributed to modifying actors' interdependencies and power relationships, other more fundamental changes could occur in the organized system. Important changes in the strategy of the actors within the system would be also noticeable.

Analyzing path-dependence processes using strategic analysis requires reframing the concept of mechanisms as defined by the classical literature on path dependence. In this case, mechanisms can be conceptualized as concrete or "substantive mechanisms" (Gross, 2009: 363) working as constraints on actors by structuring the set of rules, the formal and informal interrelationships and the resources of the concrete system of action in which actors are embedded. However, actors and the specific context influence the organization in each system. Hence, mechanisms, their quality, influence, and properties, might vary over time and across settings, depending on the actors' constellation and the context. Depending on the context and the mechanisms at work, actors are more or less embedded in a set of rules, resources and interrelationships and are also more or less able to strategically bring about change in the system. In both the path dependence and strategic analysis literature, coordination between actors plays a central role. Actors' interactions within a given system are mainly regulated by formal and informal rules (North, 1990). These rules facilitate the communication and cooperation between actors (Denzau and North, 1994: 18; Mantzavinos et al., 2004), make their interrelationships difficult to change (Greif and Laitin, 2004: 637), and make the involvement of third-party actors in the system challenging. These rules of the game, which constrain actors to play the game in a specific manner, may produce complementarities between different set of rules (Höpner, 2005). Complementarity effects may constrain actors' behavior to remain in keeping with the dominant institutional logic by providing actors with positive economic outcomes (Morgan and Kubo, 2005: 57) and make the modification of the rules of the game even more difficult. This set of rules results in a cohesive institutional arrangement which excludes other competing arrangements and gives structure to actors' beliefs and interactions in the game (Deeg, 2005). Finally, in strategic analysis, the concentration of resources in the hands of specific actors may affect the power distribution among these very actors. Large investments are therefore an important source of power and

also affect the coordination between actors in a specific system of action. Large investments may secure the stability of a structure and lead to the formation of a monopoly situation. According to Pierson (2000: 254), “when set-up or fixed costs are high, individuals and organizations have a strong incentive to identify and stick with a single option”. This situation is much more striking when costs are high and returns on investments are low. Investments thus reduce the future scope of action of actors involved in the project and constitute an important entry barrier for external actors.

While mechanisms structure actors’ interactions and power distribution across local settings, actors may also rely on various strategies to affect how change unfolds within an organized system. Mapping the concrete actors involved in the reform of the system as well as their interdependencies might be necessary for explaining how a reform in the organized system unfolds in each local setting. Several actors may compete in order to bring about the reforms of the system or to maintain the status-quo depending on their specific interests. Specific coalitions may emerge in order to work on and promote a specific alternative or fight against it. Actors opposed to a reform may also have divergent rationales to justify their opposition. Reforms may threaten the position of the monopolist, who aims to maintain the game as it is; but actors may also oppose a reform because they judge it as not going far enough. In addition to the multiple interactions between reformers and opponents, actors can also rely on external actors in order to carry out their projects. Reformers may integrate these external actors in the construction of the reform or exclude them. These external actors are not passive and also develop strategies in order to adapt to the local context and facilitate an outcome in line with their interests. These actors may share various organizational languages, defined as the set of references actors use to make decisions or manage their interactions (Thoenig, 2007: 2). These languages may be exogenous, that is, constructed outside the system and imported into it, or endogenous, that is emerging inside the system and strongly linked to the identity of this system (Thoenig, 2007: 13). All these actors may rely on various strategies to bring about or struggle against change in the organized system. They may strategically select and interpret the information from the environment in order to define possible futures for the system and impose them as the only possible alternative. Building strong coalitions is also crucial in order to

define and implement a solution. Actors therefore need to establish relationships with other strategic actors inside the system and bargain with them. In these cases, the relationship between the system and its environment — that is, between local decision-makers and private operators or actors from upper levels of government — and the control of communication channels inside the system may represent important sources of power. All these actors may intervene in different ways to reform the system but also at different stages of the process (agenda setting, formulation, decision, implementation, and evaluation (Jones, 1984)). Dividing the process into different stages might be helpful for at least three reasons: for tracing the variation in actors' interpretation of the situation during the implementation of a reform; for discussing how the implementation of similar reforms in a different context may lead to contrasting results; or for observing the consequences of change in a concrete context.

Strategic Analysis not only focuses on the origin of organizational change as the product of interactions but also emphasizes the potential consequences of such organizational change processes. These consequences are defined as systems effects. Two categories of system effects can be distinguished. Some effects contribute to impeding the success of a strategic activity. Other effects, generally called vicious circles, reinforce or maintain the problem that was supposed to be solved through a reform. In the case of vicious circles (the first category of effects), reformers cope with a problem by drawing upon the intrinsic characteristics of the system, which does not solve the problem but reinforces or at least maintains it. Through vicious circles, a change in organizational practices or structure is carried out in order to make the organization adapt to its environment. However, no fundamental changes occur in the constellation of actors governing the system and its dominant logic. The second category of effects may include contradictions within the system or escalating conflicts. In some cases, reforming a system may result in growing contradiction between the espoused goals—or the official goals of the organization—and the manifest goals or operative goals of the organization (Perrow, 1961: 855; Price, 1972: 6). Such a dilemma is common in organizations that follow inconsistent goals, where one goal precludes the other. For instance, this dilemma is typically found in public organizations that attempt to embrace profit-making goals. Ashforth (1991: 466) listed several reasons for such effects, for instance “ideological drift” — i.e.

when an organization drifts from its ideal goal to another one — and “mean-end displacement” or goal displacement (Merton, 1940) — i.e. when means used to reach the goal eventually become the goal of the organization. Finally, organizational contradictions often result in further effects, called conflict escalation between various actors or groups of actors with conflicting expectations about the organization's strategy. This situation was defined as an arms race (Schelling, 1960). When both sides act in the same way without abandoning the conflict, this may lead to a situation of blockage inside the organization. Masuch (1985: 23) modeled such cases of escalating conflicts by relying on the prisoner dilemma matrix. Generally, such effects are typical in bureaucratic and public organizations, where several actors inside and outside the organization have an influence on its functioning. In that case, carrying out new strategies often results in tensions and conflicts with the rules and beliefs of the established institutions and the actors supporting them.



## **Chapter 3: Methodology**

The purpose of this chapter is to explain the research design and to justify the various choices that were made during the investigation. I first explain the general research strategy, a multiple case study design. In a second part, I justify the selection of the empirical setting and the choice of the local cases. In the third section I describe data collection process and the data analysis, and in a final part, I discuss the scope and the limitations of this research strategy.

### **General approach: a qualitative comparative case study**

The goal of this research is to explore the variety of changes in organized systems despite continuity at the field level by examining the role played by strategic collective agency in bringing about or struggling against organizational change in these systems. In accordance with this purpose, I opted for a qualitative comparative case study design.

Qualitative analyses enable researchers to develop theoretical propositions by relying on rich empirical data that they order and interpret. The choice of this method is mainly justified because of the complexity of the social context and because of the interest in the quality of a phenomenon more than in its frequency. Hence, this research deals with complex social processes and has therefore a strong exploratory character. As argued by Eisenhardt and Graebner (2007: 26), insights into such complex processes may not be easily revealed by quantitative data. Qualitative analyses may therefore be required when scholars aim to investigate a complex social world “characterized by path dependence, tipping points, interaction effects, strategic interaction, two directional causality or feedback loops, and equifinality (many different paths to the same outcome) or multifinality (many different outcomes from the same value of an independent variable, depending on context)” (Bennet and Elmann, 2006: 457). As these authors explain, qualitative methods are

recommended as they are the most suitable for studying path dependence processes or strategic interactions, two concepts that are at the center of this study. Strategic analysis implies thick descriptions in order to enable researchers to reconstitute the specific details of the context under study and the variety of sometimes conflicting interpretations that actors give of this context (Friedberg, 2000: 62). A path-dependence phenomenon requires the researcher to describe how causal mechanisms operate in a particular context, explain the occurrence of rare events and interactions in contingency periods, and make the discovery of omitted variables possible (Bennett and Elman, 2006). In addition to that, the qualitative study is justified because the context remained unknown in the beginning of the research and needed to be unraveled in order to fully understand the phenomena under scrutiny. Finally, the aim is here to study a variation of changes in organized systems across different settings. The study is less interested in analyzing the frequency of these organizational change processes in a whole sector.

Case study strategies are a study design close to quasi-experiments and are mostly used when the research deals with “how” and “why” questions (Yin, 2009: 10). This is the case with this research, which concentrates on “why” changes in organized systems vary across local settings despite a field marked by path dependence, and “how” strategic collective agency influences these processes. Furthermore, both of the theoretical frameworks used here imply examining organizational processes. This is best done by relying on a case study strategy, which is “sensitive to causal and historical complexity” (Ragin, 1989: ix). Hence, this strategy is useful when one strives to study organizational processes in their real-life contexts and to unravel complex causal relationships over time through the clinical analysis of a specific phenomenon. Case study research may follow various strategies, that is, descriptive, exploratory or explanatory (Yin, 1981: 59), depending on the goal of the research. In the present research, the case study strategy has both an exploratory and an explanatory character. While the strategy is exploratory since causal relationships and contextual factors are not clear from the beginning, it is also explanatory because it aims to investigate causal relationships and develop theoretical propositions from them.

In this study, I investigate a variety of changes across three different settings. For that purpose, I relied on a multiple case study as it allowed me to compare and

confront various outcomes studied in each specific context, and explain the reasons for these divergences. It represents the best strategy for answering the research questions and achieving the objectives of the research — that is, explaining how and why organizational changes differ across settings in a field marked by a strong continuity. A multiple case study design is necessary when analyzing specific causal relationships “across a larger population of cases” (Gerring, 2007: 86). By relying on theoretical sampling, a multiple case design provides more theory-driven variance than a single case study, taking the specific development of each local case into account. Its purpose is to generate theory by analyzing divergence between cases, even though the analysis of the cases might not be as deep as in a single case study. In addition to a thick description of cases, the comparison represents another central analytical step within strategic analysis. Hence, scholars using the strategic analysis framework generally rely on the multiple case study strategy. Comparing makes a distinction possible between “what is purely contingent and what represents more general patterns” (Friedberg, 2000: 65). The cases may be selected either with the purpose of replicating previous cases, extending emergent theory, or with the purpose of developing theoretical categories (Eisenhardt, 1989: 537). In line with the general goal of the thesis, the theoretical sampling here is based on developing theoretical categories. These categories are built upon the variance in the nature of organizational changes and in the strategies used by actors inside these systems.

## **Selection of the empirical setting and choice of the cases**

### *Selection of the empirical setting*

The empirical setting selected in this study is the German water sector. Several studies have already analyzed this sector either using the path-dependence framework (Sehring, 2009; Bourblanc, 2011), or focusing on the importance of strategic agency in the structuration of this sector (Meijerink and Huitema, 2010). Judging from previous research, this sector provides a good opportunity for combining the path dependence and strategic analysis perspectives. In most European countries, the organization of water management systems took root during the end of the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup> century. They have progressively become strongly entrenched within each national framework and have

been characterized by a high stability. Due to the high fixed costs of its infrastructure and the low returns on investment, as well as high political and juridical constraints, making changes in the organization of water services generally remains very challenging. These rigidities in organizational structures and practices as well as in the institutional framework became more striking during the 1990s, when the European Commission started opening public services to competition in order to “increase efficiency” in such services and to homogenize their organization at the European level. In contrast to the energy, telecommunications and public transportation sectors, a liberalization of water services has not yet been implemented at the European level through the introduction of competition instruments. Any decision to open water services to competition remains, depending on the national framework, in the hands of the local authorities. In addition, the water sector is governed by a particularly great number of actors with heterogeneous interests and is generally characterized by a strong diffusion of power. This sector is dominated by public organizations, which “often if not always, receive multiple and contradictory objectives and values, and are assessed, judged, or evaluated by vested interest groups and actors which might be in conflict or in competition” (Arellano-Gault et al., 2013: 152). Hence, as argued by Meijerink and Huitema (2010), this sector is well-suited for examining the influence of actors’ strategies on organizational stability and change and for putting agency back at the center of the analysis. In general, the decision-making process in this sector includes several levels of government, private and public operators, as well as many professional associations with diverging interests.

In this thesis, the choice was made to focus just on one country. In addition to reducing the complexity of the study, choosing one country was justified by the focus of the research, which was on divergence between local settings and not on national comparisons. Thus, I did not strive to examine the impact of national settings on water management systems but to study the variety of local arrangements that can be observed within a national framework that is usually perceived as homogeneous. Furthermore, this focus on the local level enabled me to study the confrontation of two different water management models, namely the French one — concentrated in three private companies and generally organized through a long term cooperation between municipalities and one of these national operators in situations

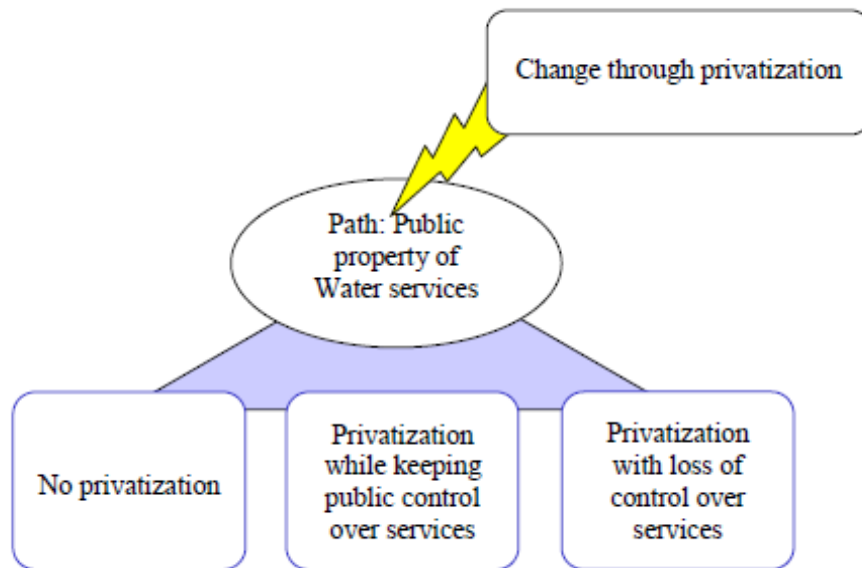
of oligopoly — and the German one — deconcentrated and under the control of municipalities and their local utilities. This confrontation was expected to shed light on why the introduction of a new model, which has been successfully implemented in a specific national context, has encountered difficulties when attempts were made to spread it to another cultural context (D'Iribarne, 1989: xxiii–xxiv).

Among various national contexts, the German water sector was selected because it represents a field that is marked by a fascinating contrast between a strong continuity at the aggregate level and different scenarios of organizational continuity and discontinuity among its local water utilities. The German water sector is therefore a very interesting field in seeking to achieve the goals of the research as it facilitates not only the examination of the tensions between field level path dependence and changes in locally organized systems, but also the analysis of the role played by collective strategic action in the dynamics of stability and change. In a context of strong regulatory and financial pressures to change, the organization of water services in Germany has been characterized by a strong continuity and homeostatic properties. In contrast to other countries, such as France or England, the German organization of public services into local and integrated monopolies under the control of local governments was attacked in the European Commission as distorting competition (for instance through the cross-subsidies). The structure and the logic underlying the German public services came in conflict with the aim of the European commission to homogenize the organization of water services inside the European single market. In Germany, competitive pressures were even stronger because of the Reunification context, which gave private water operators the opportunity to get a toehold in this sector. This situation also represented a new window of opportunity for local decision-makers, who had the possibility of relying on a partnership with private operators. However, the German model of public services, above all in the water sector, has remained almost unchanged, that is, fragmented into monopolies (*Gebietsmonopole*) under the control of the local governments and the jurisdiction of the *Länder*. Still protected from a sectorial liberalization that could make international call for tenders compulsory, it is a reliable source of revenue for municipal authorities and a strong instrument for balancing out the deficits created by public transportation. This position is reinforced

by Article 28 (2) first sentence of the German Constitution, which guarantees the institutional principle of municipal self-government.

*Selection of the cases*

Since the governance of water services is a prerogative of municipal authorities, the organization and management of water utilities may vary from one city to the other. A first selection was conducted by focusing on large German cities, that is, with more than 500,000 inhabitants. Among these, a further selection of the cases was based on theoretical sampling. In looking more closely at the 13 local organizations of this sector (See Appendix 1), I could observe various deviations from, and even ruptures with, the prevalent organizational model of water services — that is, a model that intends water services to be integrated and under public control. I compared three German water utilities that reveal contrasting organizational developments and present various degrees of stability and change in organized systems (see figure 1). The number of selected cases aimed to examine the variety of local arrangements in organized systems, while carrying out a qualitative analysis of each case in a reasonable period of time. The cases included one with only minimal changes in organizational practices (path maintenance); a case with incremental change and characterized by the introduction of a new shareholder without real influence on the water management (path inflection); and a case of radical change leading to the introduction of new shareholders with a real influence on water management (path breaking).



**Figure 1: Various degrees of change in water services**

The first case chosen for this study is Frankfurt. The Frankfurt utility (or *Stadtwerke Frankfurt*, henceforth SWF), is a case labeled path inflection. Frankfurt has been representative of German municipal utilities' development since the 1990s. During the 1990s, the local government conducted several reforms of its urban services. These changes also reflect the general evolution of the German water sector during this period. After a corporatization in 1995, SWF was transformed into a joint-stock company and merged with Maingas AG in 1998, and became Mainova AG. This reform has three specific characteristics. First, it did not imply an international call for tender. Second, it allowed a private operator, Thüga, to become a minority shareholder of the municipal utility, including water services. Last, it reinforced the utility's integration as a response to pressures from the organizational environment. Therefore, the case of Frankfurt is useful for analyzing changes in the local organization of water services, while no ruptures took place. The Frankfurt utility therefore represents a case of adaptive change, where the services were modernized and a private operator purchased a part of the utility's shares, while it still remained under the control of the municipality. Similar cases can be found in large municipalities like Cologne, Hannover or Essen.

The second case in this study is the Berlin water utility (*Berliner Wasserbetriebe*, henceforth BWB). After having conducted a first reform in 1994 by

transforming the utility into a public corporation, local decision-makers decided to sell shares of BWB. Since 1999 — after three years of political debates and one year of competition for the bid — the municipality of Berlin has been cooperating with a private consortium, composed of Veolia, RWE and Alloanz, who has owned 49.9% of BWB's shares. In this case, the local government had to partially relinquish its control over local water services. In a context of municipal financial pressures, high infrastructural investment requirements, and a decrease of water consumption, this project aimed to help avert a possible bankruptcy of the municipality. This is defined as a path-breaking case and represents an exception in the German water sector. However, Berlin does not constitute the only case of rupture in Germany. Similar scenarios unfolded in municipalities such as Potsdam, Braunschweig or Rostock.

The last case is represented by Leipzig (path maintenance). The Leipzig Water Utility (*Kommunale Wasserwerke Leipzig*, henceforth KWL) has always remained in public hands despite high competitive and financial pressures to change. Even during the GDR period, water services remained in public hands although they were extensively reorganized and centralized. Directly after Reunification, local decision-makers founded the utility, which was expected to fit with the local conditions of water management. Following this decision, a part of KWL's shares was transferred to surrounding municipalities, which have been represented in the utility by an association of surrounding municipalities (*Zweckverband Wasser Abwasser Leipzig Land*, henceforth ZVWALL). In 1998, KWL was integrated, together with other urban services, into a holding company, *Leipzig Versorgung und Verkehrsgesellschaft* (henceforth LVV). During the same time, a great number of intra-organizational measures were taken in order to adapt the utility to its environment. A partial privatization of LVV, including the water utility, was debated at the city council in 2005. However, this reform was stopped by a citizens' initiative, even though the municipality had already completed the bid for the energy utility and was preparing LVV's partial privatization. Hence, the case of Leipzig completes the theoretical sampling for several reasons. The Leipzig utility represents a striking case of continuity despite pressures to change. Only minimal modification in the management practices and organization structure were carried out in order to maintain the system and secure the dominant position of the actors governing water services. Cases where the utility remain completely under local government control



while just relying on reforms in the structure and practices can also be found in Munich or Hamburg.

	<b>Frankfurt</b>	<b>Berlin</b>	<b>Leipzig</b>
Population <sup>10</sup>	664,838	3,431,675	515,469
<b>Structure of the utility</b>			
Legal form	Joint-stock company (AG)	Public corporation (AöR)	Limited liability company (GmbH)
Business units	Energy and water distribution	Water distribution and sanitation	Water distribution and sanitation
<b>Reform of the utility</b>			
Nature of the reform	Integration	International call for tender	Integration and failed international call for tender
Shareholders	Stadtwerke Frankfurt / Main Holding (75.2%), Thüga (24.49%), Others (0.4%)	Land Berlin (50.1%), RWE (24.75%), Veolia Wasser (24.75%)	Leipziger Versorgung Verkehr Gesellschaft mbH (74.65%), Zweckverband für Wasser Abwasser Leipzig Land (25.35%)

**Table 3: Characteristics of the three local cases in 2010**

## **Data collection**

Data collection primarily focused on semi-structured interviews and documents. Relying on more than one source of data has two advantages. First, diversifying their sources may help researchers overcome a potential lack of data. In some cases, like in Frankfurt, a great number of documents were available while the access to interviewees remained difficult. Relying on several data sources also allows for the triangulation of information possible and therefore improves the internal validity of the study. Through triangulation, researchers can verify what interviewees said and avoid a retrospective bias. The data collection process started during the summer of 2008 and ended in November 2010. It started with exploratory interviews. These interviews were relatively open and served two goals. The first was to facilitate the exploration of a complex field and design the structure of later interviews. The second goal was to make additional contacts with other stakeholders through a snowball effect. These initial interviews started with more accessible stakeholders such as public relations spokesmen or members of citizens' initiatives.

<sup>10</sup> [http://www.staedtetag.de/10/staedte/nach\\_einwohner/index.html](http://www.staedtetag.de/10/staedte/nach_einwohner/index.html) (accessed 30.04.2010)

In parallel to these exploratory interviews, an initial exploration of various documents, i.e., national and local parliamentary printings and experts' reports were carried out. Experts' documents were used to identify the first key actors involved in the water sector and contact them to discuss their publications. Following a first stage of exploration, the real field research started during the winter 2009–2010. During this phase of intensive research, I reviewed the sector journals and the relevant articles. In the cases of Berlin and Frankfurt, the parliamentary archives were accessible online. The data analysis took place in parallel to the data collection. Table 4 provides an overview of the various data collected for the three local cases.

Nature of doc./cases	Frankfurt	Berlin	Leipzig
Interviews	2	10	11
Utility reports	12 (1998–2009)	20 (1990–2009)	9 (2000–2009) 8 (LVV: 1998–2005)
Sector journals (1989-2009)	55	65	80
Parliamentary archives	66	116	7
Newspapers articles	104	207	119
Specific documents	X	Privatization contracts Legal expertise on privatization contracts	- Film on the 10 years of KWL - Expertise on potential privatization projects of LVV - 2 Letters between various actors involved in the decision making- process

**Table 4: Case-study database<sup>11</sup>**

#### *Semi-structured interviews*

Semi-structured interviews were conducted with various stakeholders in the German water sector. These experts were expected to provide information both on the evolution and characteristics of the German water sector in general compared to other national water systems, and on the specific cases of interests. I interviewed experts with different functions and positions, which provided a variety of perspectives on the sector. At the national level, actors from private companies were also interviewed, such as managers from the French water companies Veolia and

<sup>11</sup> This database does not include secondary documents, just the primary sources.

Lyonnaise des Eaux (Henceforth LdE) or the German companies RWE and Thüga<sup>12</sup>. Both of these French companies have also been involved directly or indirectly in the German water sector. These interviews were useful for comparing their strategies and the contrasting logic associated with water management. Moreover, they helped me understand the difficulties the corporations encountered in expanding their activities into Germany and to shed light on the competitive advantage of the German companies in the sector. Another category of actors I interviewed were representative of German professional associations. These associations defend the interest of German municipalities and municipal utilities at the national and European level and have been involved in maintaining a local and public model of water services. Through their broad views or their direct involvement in several local cases, these actors could provide information about concrete cases as well. In the three municipalities, I conducted interviews with local stakeholders and decision-makers. Especially important were members of the municipal administration responsible for these services, i.e., deputy mayors for finance, economy and environment, employees of the municipal utility (board of directors, employees and members of the trade union), and external actors involved in the municipal water policy, such as consumer associations and citizens' initiatives. The general goal of these interviews was to collect evidence on the specificity of the local system of water services in each municipality. These not only shed light on the way a privatization process is conducted and on the alternatives supported by the various stakeholders, but also helped clarify the actors' point of view concerning the privatization, as well as their own interests and positions in the water policy process.

Interviews were conducted using an interview guide developed from the theoretical framework established in Chapter 2. This interview guide made it possible to conduct the interviews in a relatively standardized way despite the variety of interview situations (see Figure 2). However, despite the elaboration of a general guide, my interviews were open to digressions on every issue the interviewees deemed important. After a brief introduction to the project, the interviewees were asked to explain their specific function in the local water services and the reason why they were involved in the sector. A description of their position in the field was an expected prerequisite for understanding their specific vision of local water policy.

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<sup>12</sup> In December 2009, E.ON sold Thüga to a consortium of public municipal utilities.

The second part of the interview concentrated on the local reform in water services and aimed to generate insights into the conditions of stability and change in each local municipality. Interviewees were first asked to briefly present the water utility and were then asked to describe the reform in detail. I asked for the respondents' views on the factors that may have contributed to impeding a privatization (such as the state regulation or the cross-subsidies), the reasons that led to a debate about a reform and to the framing of water services as an issue (critical events, performance of the utility), as well as the key actors involved in the policy reform and the formulation of solutions. In a third part, interviewees were asked to make a general evaluation of the reform, to describe the consequences it had for the water services and the reaction of other stakeholders following this process. This last question was aimed to assess potential systems effects of reforms at the local level. Finally, the last set of questions focused on the broader privatization context and had two purposes. First, these questions were designed in order to draw a link between the position of the interviewees in its specific context of action and interest at the local level and its general view of privatization. For instance, some interviewees argued for a privatization of water services in their specific cases but were more moderate about privatizing water services in general. In contrast, others were strictly opposed to a privatization or a reform in their municipalities but could imagine that in certain cases, a privatization might have been appropriate. The second goal of these questions was to gather potential information on other local cases. This made it possible to collect new information and perspectives of external actors on the other cases under examination — for instance by asking actors in Leipzig their opinion about the BWB's partial privatization. This line of questioning also provided information about other cases not studied here, but which provided a deeper understanding of the broader context that the cases studied in this research are embedded in.

- 1) *Presentation of the project and goal of the interview*
- 2) *Description of the position of the interviewee and its role in the water policy*
  - Description of the interviewee's role in water policy
  - Relationship with other actors involved in local water policy
  - Reasons for having become involved in water policy
  - Role and function of the interviewee in water policy reform
- 3) *Reflection on the organizational development*
  - The historical development of the organization
  - Influence of specific mechanisms, such as cross-subsidies or state regulation, on organizational change
  - Reason that led to the creation of agenda building on water policy (problem definition)
  - Identification of key actors during the utility reforms (strategies, resources, interests in conducting or avoiding the reform)
  - Description of the debates and arguments related to the water utility's reform
  - Presence of private interests before the reform and role of private companies during the reform?
  - Evaluation of the reform and the consequences they have had on the organization of the services? (influence of side effects on the organizational development)
- 4) *Attitude toward privatization of urban services and especially water distribution*
  - General view of the German water sector in contrast to other countries
  - Comparison with other cases inside the German water sector
  - General arguments for or against privatization

**Figure 2: Standardized structure of the interviews**

In total, 38 interviews with 40 individuals were conducted. All were key stakeholders or representatives of organizations involved in the German water sector at the local or national level. However, the difficulty in accessing the field, associated with the limited time for conducting the fieldwork, made the number of conducted interviews inferior to the expected number. Two interviews were conducted in a group of two individuals. 29 interviews were recorded and transcribed, while 5 individuals only allowed written notes. Notes were taken during these interviews and were written up directly after the session. Interviews marked with a (\*) were conducted before the beginning of the study, as exploratory interviews or as interviews for other studies, but analyzed according to the new analytical grid. Interview sessions lasted from 20 min to 130 min depending on the stage of the research and the time granted by interviewees, and followed the semi-structured interview guide. Informants were contacted either per email, phone or even by mail. Among these, several hold multiple positions in the German water sector. For instance, some members of professional associations were also members of supervisory boards of municipal utilities and could therefore report on both the

water services at the national level and in a specific local context. Table 5 establishes a detailed list of all the respondents and their function in the German water sector.

Case	Position of the interviewees	Code
Professional Associations	Association of Local Utilities (VKU), head of the water department	PA1
	Ver.di, head of the water department	PA2
	Association of German Municipalities (DST), head of the water department	PA3
	Alliance of public water industry, member of the direction	PA4
	Water association Eifel Ruhr, public relation	PA5
Berlin Case	Member of the <i>Berliner Wassertisch</i>	BC1
	Member of <i>Haus und Grund</i>	BC2
	Member of the Berlin Parliament (Linke)	BC3
	BWB, assistant of the direction and director of public relations	BC4
	BWB, former member of the board of directors	BC5
	Former CDU state secretary for economic affairs	BC6
	Consultant for Vivendi during the partial privatization	BC7
	Consultant for the Berlin senate during the partial privatization	BC8
	Former member of the Berlin parliament (SPD)	BC9
	Member of the Berlin Senate for economic affairs	BC10
Leipzig Case	Member of APRIL network	LC1
	Verdi Saxony, former member of the direction	LC2
	KWL, former head of the public relations	LC3
	SWL, member of the work council	LC4
	KWL, former manager (organizational development)	LC5
	Former CDU deputy mayor for economic affairs	LC6
	Former deputy mayor for environment	LC7
	ZVWALL, former head of the direction	LC8
	KWL, manager (law and security)	LC9
	Member of the city council (Linke)	LC10
	KWL, former direction of public relations	LC11*
Frankfurt Case	Mainova director of public relations	FC1
	Mainova manager (organizational development)	FC2
	Mainova manager	FC3
Private operators	Veolia former adviser of the president	PO1
	Veolia Wasser, member of the board of directors	PO2
	Thüga, member of the public relations	PO3
	Lyonnaise des Eaux, former member of the board of directors	PO4
	Lyonnaise des Eaux, former adviser of the president	PO5
	Lyonnaise des Eaux, former manager	PO6
	RWE environment, former member of the board of directors	PO7
	Veolia, manager in the departnement for relationships with municipalities	PO8*
	OEWA, manager	PO9*

**Table 5: List of the interviewees**

*Documents*

In addition to these interviews, an extensive number of documents were collected. These documents can be categorized into four different sources. First, *expert reports* that encompassed various experts' viewpoints on water management at different levels. National or international expert reports provided me with important information on the empirical setting, like comparisons between the water sector and other sectors in Germany or between the water sector in Germany and in other countries. These reports were published by institutions with specific interests (such as the World Bank, the European Commission, or the German ministry for economic affairs) and therefore served mainly political goals, which allowed me to compare viewpoints on the German water sector from international and German institutions. Expert reports were also collected at the local level and often served as important sources of expertise in the debates on water privatization. Secondly, I relied on *specialized journals* from German professional associations dealing with urban services and especially water services. Among these journals, I collected key information from the *Zeitschrift für Kommunale Wirtschaft* (Journal of Municipal Economy) and *Gas und Wasserfach* (*Gas and Water Business*). Like the expert reports, these journal articles provided crucial insights into the current debates on the German water sector, and on the organizational development in various local cases. Compared to expert reports however, these documents had the double advantage of being published on a regular basis and of covering a long period of time. In addition to secondary data, these documents were helpful for studying the creation of the German water system.

In addition to expert reports and specialized journals, local documents were used as the central data of this study. The third source of information was constituted by the local parliamentary documents. While online archives provide access to the political debates for Berlin<sup>13</sup> and Frankfurt<sup>14</sup>, Leipzig's municipal archives were not open to the public and its online archive only contains documents from 2005 onwards. To complement these parliamentary documents, I collected articles from local newspapers in which the local water policy reforms were debated. In Berlin, several newspapers were available (*Berliner Zeitung*, *Tageszeitung*, *Berliner*

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<sup>13</sup> <http://www.parlament-berlin.de:8080/starweb/AHAB/>

<sup>14</sup> <http://www.stvv.frankfurt.de/parlis2/index.htm>

*Morgenpost*, *Tagesspiegel*), Frankfurt's debates were covered by two newspapers (*Frankfurter Rundschau*, *Frankfurter Allgemeine Zeitung*) and Leipzig's debates by one (*Leipziger Volkszeitung*). In Berlin, I collected information mainly from the *Berliner Zeitung* and the *TAZ* which have covered the political process in detail. In Frankfurt, I collected information mainly from the *Frankfurter Rundschau*.

In general, these documents were helpful for the analysis of the debates on water privatization in each municipality and were an essential source of information for the study of agenda building (construction of the problem, formulation of solutions) and the actors' coalitions in each municipality. These data were then used to analyze the strategy of private operators in each local context, as well as their relationships with local authorities. Last, various documents produced by the municipal utilities were processed in order to trace the organizational development and analyze the organizational changes in the structure, practice and strategy of each utility.

## **Field access**

The access to the field represented a significant hurdle during the data collection stage. For instance, it was not possible to obtain the utility reports directly from the various water utilities, even though these utilities are municipal enterprises. The answer to that request was always to provide advice about the online publications, which did not encompass the whole period under study. In one case, Berlin, it was possible to find the utility reports in a municipal library. In the other cases, only the reports published online were used and additional sources of data were collected in order to complete the missing information. Unexpected events also made data collection more difficult. For instance, in Leipzig, a financial scandal hindered almost all chances to obtain an interview with KWL's managers. In Berlin, the tension between the stakeholders concerning the publication of the privatization contract also made the access to information more difficult. Hence, access to sources varied considerably across cases. While in Berlin, a large volume of data could be gathered, the access to data in the two other cases was much more limited.

Obtaining interview opportunities with stakeholders was also a complex task, especially in Frankfurt and Leipzig. Depending on actors' position in local water



management, interviews were more or less difficult to obtain, even when the request was supported by personal contacts. In Leipzig and Berlin, several interviews could easily be conducted with opponents to the privatization projects, especially among citizens' associations or members of the political opposition. While 38 interviews were conducted, 41 of the interview requests were rejected or remained unanswered for different reasons. Almost all the interviewees were asked at least two additional times in case they hadn't replied to the first request. A large number of actors claimed that they were not allowed to speak because of their position inside the utility, for instance on the supervisory board. Other actors did not have time to be interviewed. Several actors also claimed that there was nothing specific to say about the water utility or that they couldn't recall how the reforms had occurred. In general, actors from private companies were more accessible for interviews than actors from municipalities or municipal utilities. Among private companies only three requests remained unanswered<sup>15</sup>. In several cases, the interaction with the respondents during the interview process was another difficulty to overcome. In cases where interviews were not recorded, taking detailed notes made focusing on the discussion more difficult. Finally, the problem of field access resulted in a bias in the equivalence of the positions between actors across cases. Initially, I expected to conduct interviews with actors who had the same position across all cases, in order to better assess the discourse of the actors depending on their position.

## **Data analysis**

The data analysis followed the steps generally used in a multiple case analysis, defined by Einsenhardt (1989) as the within-case analysis, followed by a cross-case analysis. During the phase of collection, a case-study database was constituted as a support for the writing up of the three case studies. In parallel to that, I started to analyze the constitution of the German water sector relying on secondary sources, such as a historical analysis of German public services. This sector analysis was aimed at understanding the creation and the features of the sector in an historical

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<sup>15</sup> Fewer requests were made to private operators than to local decision-makers

perspective and identifying the long-lasting continuity at the sectoral level, as well as identifying the underlying mechanisms driving this stability.

The first stage of analysis consisted in the write up of a detailed case study for each case. Case stories were written relying on all the documents that had been collected beforehand. The documents collected for each case were coded based on the theoretical framework. Through this process, it was possible to generate knowledge about the different cases. For each case, the within-case analysis enabled me, for instance, to identify the key actors involved in the water policy, to study their behaviors, interests, and strategies as well as their concrete interaction over time. Moreover, this step allowed me to shed light on the concrete organization and functioning of water services in each municipality. This within-case analysis resulted in a “thick description” (Geertz, 1973) that aimed to study the behavior of individuals and events in their specific historical and cultural contexts and to capture in details the “feelings, actions and meanings of interacting individuals” (Denzin, 1989: 83).

In the second phase, the cross-case analysis, the various cases were compared with each other. The aim of this stage was to identify the similarities and differences across cases. For that purpose, I used the strategy of temporal bracketing. This strategy of data analysis consists in dividing a process into various sequences in order to better isolate and compare causal relationships and is “especially useful if there were some likelihood that feedback mechanisms, mutual shaping, or multidirectional causality will be incorporated into the theorization” (Langley, 1999: 703). This strategy is very helpful for comparing several cases over a long period of time. I therefore divided the analysis of my cases into sub-sequences and identified variations in the key concepts derived from my theoretical framework: path-dependent mechanisms, actors’ strategies, and system effects. In addition, I relied on the analytical grid developed by Jones (1984), as a heuristic, in order to compare the policy processes unfolding in each case. Jones divided a policy process into five stages: problem identification, formulation of solutions, decision taking, program implementation and evaluation (see Appendix 2). In a final step, differences and similarities found across cases were compared with the analytical framework and potential ways for theoretical extension were discussed.

## **Quality of the research**

In qualitative research, several criteria are commonly used in order to evaluate the quality of the study. “In the positivist tradition, four criteria are commonly used to assess the rigor of field research: internal validity, construct validity, external validity, and reliability” (Gibbert et al. 2008: 1466). Although several qualitative researchers claim that such validity and reliability criteria primarily apply to quantitative studies and that alternative criteria need to be developed to assess the quality of their own research (Lincoln and Guba, 1985; Seale, 1999), these criteria have been adapted to suit case study research (Yin, 2009).

As the first criterion, construct validity deals with the researcher's subjective judgments and interpretation of the data. Different strategies can be used to counter this criticism commonly addressed to qualitative research. First, a clear chain of evidence between the initial question and the final conclusion of the study needs to be traced. It is therefore important to describe the conditions of the data collection and explain the data analysis process. I presented this chain of evidence in the previous section, by describing each research step I undertook from the research question to the discussion on theoretical conclusions. Second, I improved the construct validity of the study by triangulating the data. The comparison of data produced from interviewees with data derived from documents, especially from the parliamentary printings, was useful for controlling the objectivity of the information collected.

Internal validity refers to the robustness of the causal relationships between the variables and the result. To improve the internal validity of the study, a theoretical framework directly derived from the literature was developed. Starting with the recent debates on organizational path dependence, I showed that a path-dependent explanation, using mechanisms and external shocks was not sufficient to analyze the dynamics of stability and change at the local level as well as variation between path-dependent processes. To complete this framework and explain a variety of organizational changes, the strategic analysis framework was used. This framework was developed in the end of Chapter 2. Furthermore, the logic of pattern matching was adopted. This allowed me to compare the empirical patterns with the

ones predicted in the theoretical framework, namely, the path-dependent mechanisms, actors' strategies, and the system effects.

External validity is defined as the capacity of generalizing the results of the study to other empirical settings. In this study, external validity was mainly ensured by carrying out a multiple-case design. Relying on three cases enabled me to proceed to an "analytical generalization" from empirical situations to theory (Gibbert et al., 2008: 1468), while excluding the specificities of each local setting studied. Hence, this study contributes to discussing the influence of actors' interdependence and strategies to explain various path changes across local settings. Its purpose was also to discuss the relationship between organizational path dependence and path change at the local level despite a high stability at the field level. This analytical generalization was made by replicating the analytical framework in various local settings and carefully selecting the cases.

Finally, reliability refers to the replicability of the research and the ability to obtain the same results by excluding random errors. The reliability of the study was improved by documenting the various steps of the research in a case-study protocol. This increased transparency in the data collection, data analysis, and in the results of the research. During the data collection phase, each collected document was compiled in an excel file. This made it possible to easily trace all the sources used for the writing up of each case. In addition to this, reliability during the data collection process was achieved by relying on semi-structured interviews, whose guidelines are described in Figure 2. I relied on a case-study protocol during the investigation in order to make each step of my research clear and traceable. These various steps included the selection of the empirical setting and cases, as well as the data collection and analysis, which were presented in this chapter.

## **Chapter 4: The constitution of the German water sector as a path-dependent process**

This chapter examines the creation of the German water sector from the perspective of path dependence and provides the reader with the general configuration as well as the key characteristics of this sector. In a first part, path dependence is presented as a common framework for analyzing urban services. In a second part, I analyze the creation of a path in the German water sector by relying on the recent literature on organizational path dependence (Sydow et al. 2009). Dividing the process into several stages, this recent research is helpful for tracing the emergence of stable patterns in and among organizations and for identifying organizational rigidities. Drawing on this research, I argue that German stakeholders in the local water policy are dependent upon a local and public organizational model of urban services. Finally, I examine the mechanisms that underlie the constitution of this model as well as the central actors of the system.

### **Path-dependence analysis in urban services<sup>16</sup>**

A great number of scholars have relied on the path-dependence framework to examine urban services, especially at the institutional and technical levels. The high institutional "embeddedness" and the long-life of technical systems make urban services an appropriate sector for analyzing path-dependent processes. Although path-dependence is not explicitly at the center of Lorrain's analysis (2005a), he demonstrated the pay-off of using such a framework. By comparing the properties of various European models of urban services, he pointed out the importance of taking an historical perspective in order to study the stability of national models despite

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<sup>16</sup> In this section, I refer more broadly to the literature in urban services which often includes the water sector.

various crises. Drawing on an institutionalist perspective and taking the national framework as level of analysis, other scholars focused on a specific sector. Midttun et al. (2003) demonstrated that national electricity sectors have remained stable across Europe despite pressures driven by deregulation and globalization. Studying the water sector in central Asia, Sehring (2009) pointed out the difficulties of two countries (Kyrgyzstan and Tajikistan) in carrying out reforms after their independence. Despite a change in the institutional environment, decision-makers were still influenced by path-dependent behaviors inherited from the Soviet period, which impeded the implementation of a change process. Concentrating on the local level, Lorrain (2005b) described a path-dependent process in the French water industry by demonstrating that local authorities progressively lost control over their instruments for governing water (financial, technical) and therefore became increasingly dependent on various experts. Bourblanc (2011) confirmed Lorrain's assumptions by showing the central role of public action's instruments for governing water. Taking the governance of water pollution in Brittany as a case, she demonstrated that actors in the field of public policy are more dependent on their own instruments of public action than on a specific path, defined here as an institutional direction.

Scholars have explained the path-dependent character of water management with reference to a multitude of factors. For them, the high stability of this system is driven through high sunk costs in infrastructures and their long-life cycle, through the closure of the local water cycle, and through the persistence of a traditional logic of services coupled to the infrastructures (Moss and Hüsker, 2010: 6).

*“Their embeddedness in the localities they serve is generally very high — not only physically, but also politically, economically and socially. The high level of investment in sunk infrastructure (literally and metaphorically) requires long-term amortization. This, coupled with their longevity — in the case of sewers, of well over a century — provides a strong case for structural obduracy. Furthermore, infrastructure systems of this kind are planned and operated according to powerful conventions and standards of practice. Path dependencies would thus seem omnipresent in large technical systems.” (Bernhard and Moss, 2008: 2)*

In their paper, Bernhard and Moss investigated the technical water system in two municipalities in France and Germany (Strasbourg and Berlin), which were subject to disruptive events. They looked at how these events contributed to the

reconfiguration of Strasbourg and Berlin's "infrastructure systems" (Bernhard and Moss, 2008: 2). Although these scholars have tapped into a very interesting research area, they have only used the concept of path dependence in a loose manner. They have mainly stressed the stable and processual character of this concept and ignored what should be, according to the recent theoretical literature on path dependence (Sydow et al., 2009: 698), the main focus of the analysis, namely, the positive-feedback mechanisms.

In other words, the path-dependence argument is well suited for analyzing the water sector because it is strongly influenced first by the weight of history, which differs from country to country, and second by the high investments in infrastructure and the low returns on investments. Yet, studying the influence of positive feedback mechanisms will be necessary to claim the existence of a path-dependent process. While focusing on organizational stability, the path-dependent framework allows researchers to shed light on the conditions leading to creation of persistence. Analytically, a path-dependent process is usually divided into various phases, such as the recent three phases model developed by Sydow et al., (2009), and has found several empirical applications, such as in the timber public auction in France (Marty, 2010) or in the German finance system (Deeg, 2001).

### **The German water sector: a path-dependent process**

As other urban services, the German water sector is usually described as a largely public and local system (Lorrain, 2005a). Following Sydow et al. (2009), the creation of the German water sector may be analyzed as a path-dependent process made up of three stages and resulting in a high continuity in its main features, that is, its public and local character. During the first stage of the path-dependent process — called the pre-formation phase — various solutions were available and no real governance model dominated the organizational field. In a second stage (the formation phase), a process of standardization unfolded and — through the influence of mechanisms — a dominant model emerged in the landscape of urban services, driving therefore the local decision-makers to a third stage — the lock-in.

*The constitution of the German water sector*

The phase of pre-formation: From the middle of the 19<sup>th</sup> century, in a context of growing industrialization, urbanization, and agricultural changes, the problem of managing water gained in importance. In this context, local authorities had to find a way to finance, construct, and manage the infrastructure necessary for providing a water supply and sanitation. Local decision-makers thus found themselves in a period of trial and error, and attempted to find the optimal solution to cope with their local problems of water management. In this phase of relative institutional fluidity, no legal framework constrained municipalities. Despite the huge fixed assets necessary for building the infrastructure, this period was characterized by some variation in modes of water governance. In this period, the emergence of a dominant model of urban services was, however, already influenced by the dynamics of regionalism and national unification. Following the Thirty Years War, the German ruling classes were increasingly influenced by the French aristocracy. This historical development contributed to shaping “German national character” (Elias, 1973: 33–34) by strengthening the separation between local administrations, influenced by the local bourgeoisie, and the state administration from which this very bourgeoisie was excluded (Häussermann, 1992: 26; Barraqué, 1995: 430). In addition to this dualism in the administration, Germany’s late unification associated with the willingness of Bismarck to reinforce the German position in Europe resulted in keeping strong federated states, which have thus far maintained strong legal competencies. Hence, from the Customs Union (*Zollverein*) of 1834 until its political Unification in 1871, Germany emerged as the product of the cooperation between “regional political leaders that established an expanding common national framework for the functioning of a new political, economic and cultural entity” (Ziblatt, 2006: 32).

In parallel to this evolution, the municipalities progressively reinforced their autonomy. In 1808, the Prussian City Ordinance (*Preussische Städteordnung*) granted the municipalities more financial independence (Naßmacher and Naßmacher, 1979: 19-20). The Municipal Act of the Freiherr von Stein of 1808 and the Mayor Constitution of the post-Napoleon period settled the premises of self-government. This principle institutionalized the idea of self-regulation for municipal affairs and contributed to the emancipation of municipalities from the intervention of upper government’s levels (Edeling, 2008: 146). During this period, social and



infrastructure policies could be considered as the most important fields left in the responsibility of the municipalities. These policies had first emerged at the municipal level and were then adopted at the state level (Häussermann, 1992: 26). This process contributed to the development of strong local administrative and professional elites and confirmed the emergence of strong municipal utilities, which represented the backbone of the free local administration (Häussermann, 1992: 27). The municipal utilities could take different forms since, according to Article 28 § 2 of the German Constitution, municipalities are free to decide how to manage the provision of municipal services (*Selbstverwaltung*). They could either create a municipally owned utility (*Eigenbetrieb*) under their control or keep these services integrated in their administration (*Regiebetrieb*). While water management was generally carried out without relying on private partners (such as in Düsseldorf, Cologne, Leipzig, Augsburg, or Eisenach) a lack of technical know-how and financial resources led several municipalities to draw up contracts with private enterprises. This was, for instance, the case of the cities of Berlin and Potsdam, whose water utilities were founded and first managed by British private companies (Wessel, 1995: 56–57). Hence, until the first decades of the 20<sup>th</sup> century, no model dominated the way of organizing water management. As Ambrosius put it (2000: 204), “*im Vergleich zur zweiten Hälfte des 20. Jahrhunderts wurde der Aufbau der modernen Infrastrukturdienste zumindest bis zum Ersten Weltkrieg grundsätzlich durch pluralistische Konkurrenz gekennzeichnet, in der private und öffentliche Unternehmen, die Gebietskörperschaften untereinander und private Unternehmen gegeneinander im Wettbewerb standen. Dennoch begannen sich bereits in dieser Zeit monopolistische Strukturen herauszubilden*”.

In the end of the 19<sup>th</sup> century, municipal authorities had already started to consider the provision of the service delivered by private enterprises as not satisfying enough (high prices, low quality). Furthermore, diverging interests between private operators and municipalities appeared concerning the expansion of the municipal supply area. These two problems resulted in a progressive remunicipalization of German water services (Musiolick, 2007: 10). The importance of private-sector solutions thus gradually decreased and water management increasingly became a public affair, almost exclusively in the hand of municipalities. Due to the local management's structure and their lack of financial and technical power,

municipalities started integrating their water supply with other local services, such as gas, electricity, and public transportation. This solution, which had already existed during the second part of the 19<sup>th</sup> century, gained in importance, since it enabled municipalities to rely on economies of scope. This integration process started first with the provision of gas, followed by electricity provision, and last by public transportation (Braun and Jacobi, 1990: 109). Furthermore, municipalities financed these sectors, which required important investments, through the profit made in various economic activities, such as taxi, advertising, or construction companies.

*“Bereits vor dem Ersten Weltkrieg begannen die Gemeinden in die Lebensmittelversorgung, den Wohnungsbau und bestimmte Gewerbebezüge einzudringen. Dieser Trend verstärkte sich im und durch den Krieg und setzte sich in den 1920er Jahren fort. Die Kommunen engagierten sich bei Flughäfen, im Fremdenverkehr, bei Taxi- und anderen Fuhrunternehmen, im Anschlags- und Reklamewesen, in Baugesellschaften, verstärkt im Geld- und Kreditwesen”* (Ambrosius, 1995: 21–23).

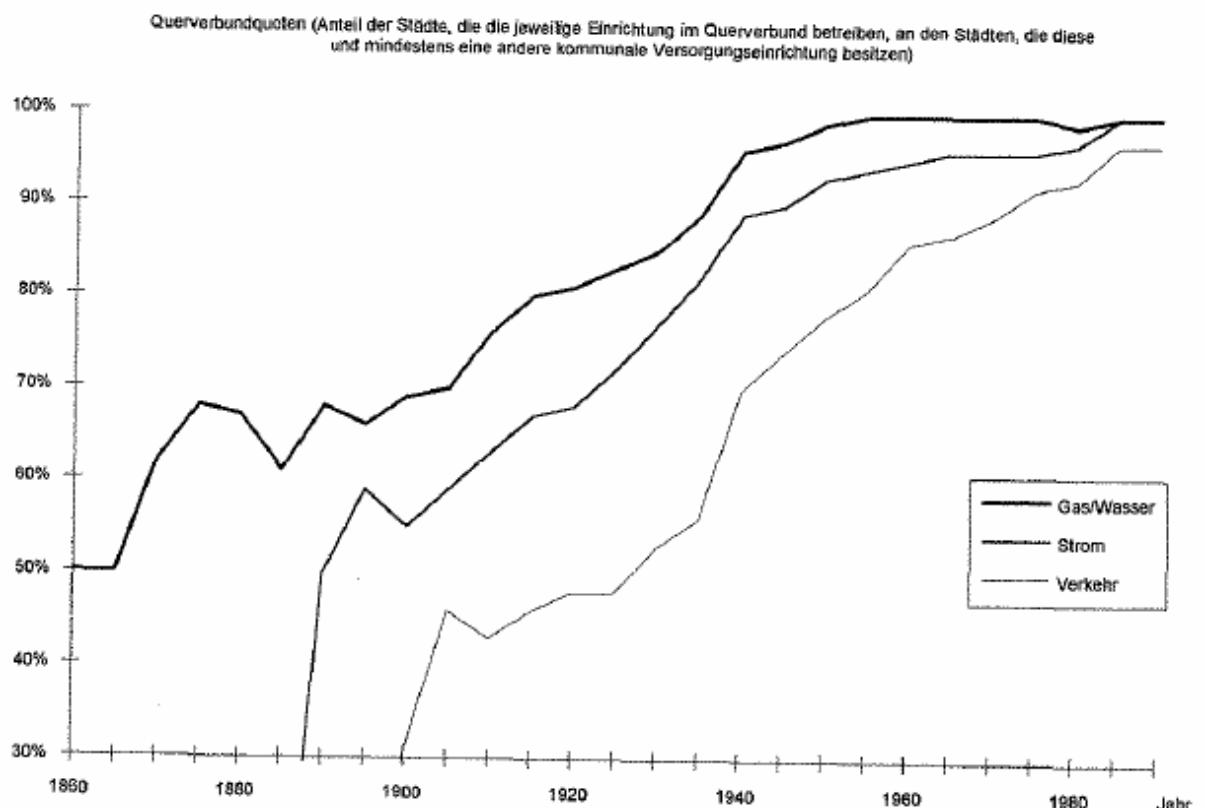
The phase of path formation: While the first decades of the 20<sup>th</sup> century can be regarded as a phase of experimentation for municipalities in the field of urban services (Ambrosius, 1995: 32), the inter-war years represented a critical period in the formation of the German water sector, within an integrated model of urban services. First, the municipalities' economic expansion was challenged by the economic crisis of 1929, which resulted in limiting the communal economy and therefore restricting municipal self-government's scope of action (Braun and Jacobi, 1990: 19). In the same period, private companies also criticized municipalities' economic commitment and argued that competition with municipal authorities in various sectors was unfair. In agreement with several political actors, these private companies claimed that it was not the purpose of municipalities to develop competitive businesses (Ambrosius, 1995: 23). These pressures forced local governments to concentrate on public services necessary for the well-being of the local population and to relinquish a commitment in other sectors. During this period, a legal framework emerged in order to constrain and guide the behavior of municipalities and their utilities in the management of public services. The German Municipal Code (*Deutsche Gemeindeordnung*), officially ratified in 1935, stipulated,

for instance, a strict delimitation between economic and non-economic organizations and forbade, through the locality principle (*Örtlichkeitsprinzip*), the development of municipal businesses beyond their local borders. This act was followed by the Act on Municipal-owned Utilities (*Eigenbetriebsverordnung*) of 1938, which required the integration of urban services (*Querverbund*) within the same communal utility (Ambrosius, 1995: 29). This order set the legal framework that defined local authorities' scope of action (Reidenbach 1995: 81). This institutional framework has remained almost unchanged to this day. In order to fulfill the general interests of the local population (*Daseinsvorsorge*), and to secure affordable prices for citizens, municipal enterprises were not allowed to generate a profit, but instead were encouraged to balance the loss-making sectors (public transportation) with the prosperous ones (gas, energy and water supply).

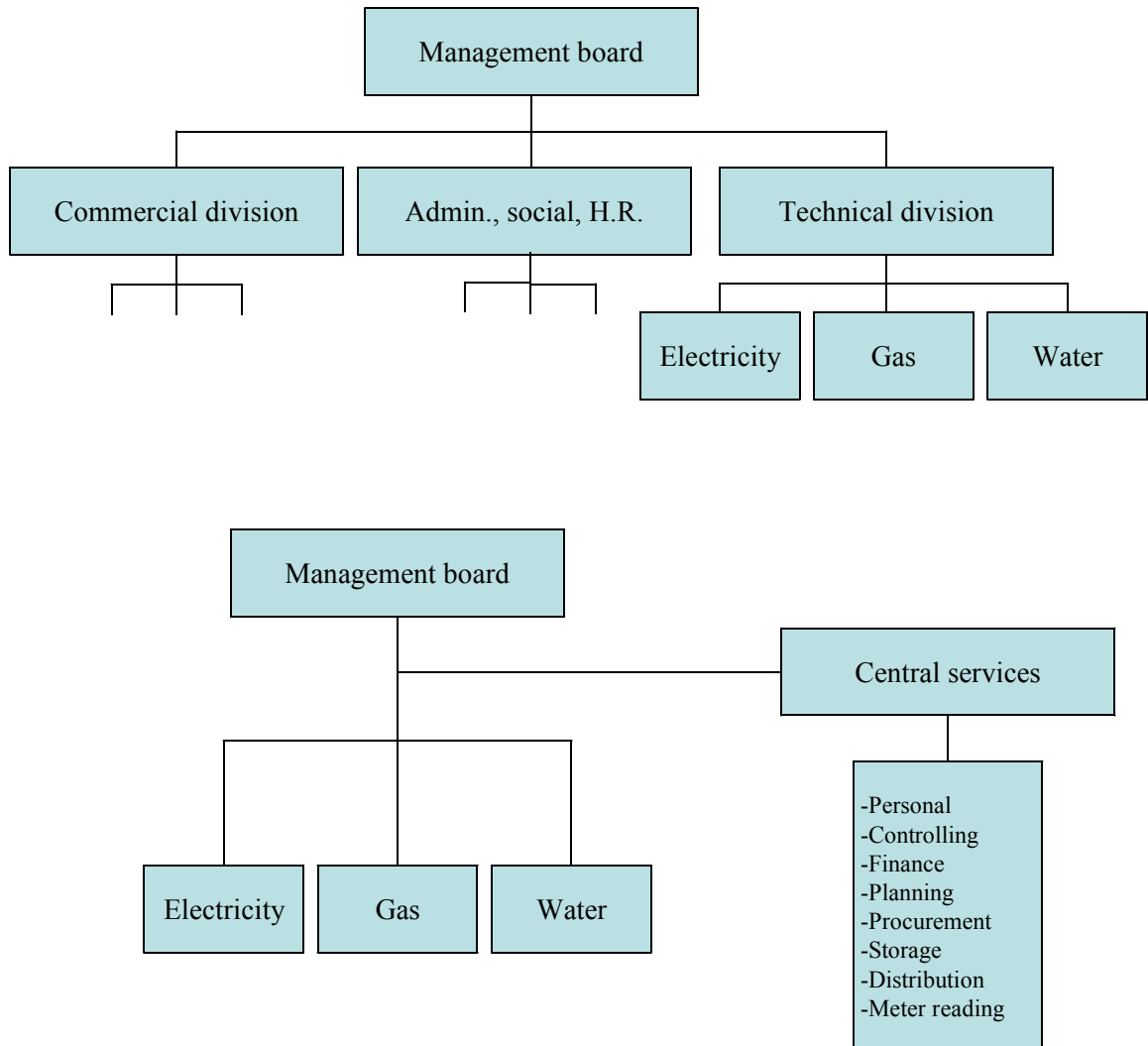
As far back as the 1920s, the Association of German Mayors (*Deutscher Städtetag*) encouraged German municipalities to create integrated municipal enterprises (*Eigenbetriebe*) (Ziebill, 1956: 195). Still legally dependent on local authorities, these utilities remained organizationally and financially independent (Cronauge, 1997: 63). Regarded as a task linked to public health issues, water sanitation, in contrast, was organized as a municipal department (*Regiebetrieb*) fully incorporated into the local administration. According to the Article 4.5 of the corporation tax law (*Körperschaftsteuergesetz*) ratified in 1920, as a sovereign task this sector is usually exempted from taxes as long as its organization remains under public law. While the integration of water distribution and sanitation might result in increasing economic and technical synergies, local decision-makers have generally been reluctant to integrate both tasks into the same organization. One of the reasons was that it would cancel out the fiscal advantage provided by the sanitation tasks and might cause a price increase in water services (Jabcobi, 1988; Kraemer, 1992). This legal framework influenced the formation of urban services into a public local monopoly. It established a strict separation between public and commercial tasks and clearly delimited the businesses of each actor. On the one hand, private companies were not allowed to be involved in municipal services and municipal utilities might not develop competitive businesses. Consequently, municipal utilities came increasingly under exclusive municipal control and were no longer allowed to compete with private companies in sectors not directly linked with the fulfillment of

the public duty. Moreover, the synergies produced by integrating various urban services into one organization allowed municipal utilities to resist many crises, such as the financial crisis following World War I. This model became part of the “local economy” (*Kommunalwirtschaft*) that characterizes the provision of local government services and a viable alternative to privatization (Ambrosius, 1995: 42).

In the graph below (Figure 3) we can see that the management of public services was progressively standardized, taking the form of local transversal enterprises called *Stadtwerke* (The typical formal structure of these organizations is illustrated in figure 4). This standardization process is characterized by two trends. The first one is indicative of a movement towards more integration between the various local services. The second shows a movement of diffusion of this integrated model throughout Germany. Hence, it can be noticed that, over time, an increasing number of municipalities have adopted this model.



**Figure 3: Integration's rate (% of municipalities who managed urban services in an integrated way over time) (Source: Ambrosius, 1995)**



**Figure 4: The formal organization of Stadtwerke (Source: Braun, 1987: 364-365)**

The lock-in phase: Following its formation, the German model of urban services has remained highly stable and was able to cope with various situations of crisis, such as privatization waves during the 1970s (Ambrosius, 1995). According to Lorrain, the stability of the German model lies in its ability to preserve several “intrinsic properties” despite important crises such as Reunification and deregulation. Even in turbulent times, the model has kept its local and integrated organizational structure, and its own logic, characterized by the fact that the task of public services belongs to the municipality (Lorrain, 2005a: 260). For Rüdig and Kraemer, the stability of the German water sector has been essentially based on its success.

*“Another and perhaps the most important, defense has been success: local authorities and the Länder, either on their own or in horizontal coordination, have generally delivered the goods. This inherent stability has made it possible that next challenges of the late 1980's and 1990's, in particular privatization and unification, had no profound impact on the structure of the German water policy.”*  
(Rüdig and Kraemer, 1994: 73)

A dominant model grew among the population of organizations and persisted despite the existence of alternative courses of action. Theoretically, the presence of alternative arrangements could have led local stakeholders to reconsider their own model. At this stage, however, actors became locked-in to a dominant governance model. It can be argued that local decision-makers have been subject to a strong cognitive lock-in as they have recognized the existence of potential alternatives but have seen no reasons to adopt them.

*“Wenn sie in den alten Ländern ein erfolgreiches kommunal-wirtschaftliches Modell über Jahrzehnte gefahren sind, haben sie keinen Grund zu sagen, warum soll ich denn da jetzt jemand anderen damit beauftragen.”* (PA1)

*“Solche Modelle schweben ja manchen Leuten auch hier vor. Könnte man in Deutschland genauso gut machen, wollen wir aber nicht. Das wollen wir nicht.”*  
(PA2)

In the preceding period, municipal utilities began to accumulate a high level of technical know-how in the field of infrastructure. They also became an important motor of the local economy and a great source of income for the city. Their collaboration with other actors generally contributed to strong inter-organizational relationships at the local level. For instance, utilities have developed strong partnerships with local enterprises, such as technology or equipment suppliers, laboratories, or local universities. Furthermore, following this model, all resources and responsibilities have been concentrated in the hands of local decision-makers. Hence, the formation of this model and its positive consequences at the local level reinforced the general economic belief that the best way of coping with market failure was to rely on a local monopoly.

In addition, this cognitive lock-in has also been reinforced by a specific constellation of interests (municipalities, utilities, local enterprises), which makes a potential attempt to change the model even more difficult. The model therefore serves the interest of specific actors, the local monopolists, who in turn have no

reason to promote a change by conducting a privatization. As stated by an interviewee, these specific interests strengthen the actors' beliefs that the adopted solution is the most appropriate one and that a change would have negative consequences.

*“Dass einzelne Kommunen wie Braunschweig, dieses Modell des "Selbst-Tuns" ablösen durch die Überlegung, vielleicht kann das ein Konzern, der insgesamt weltweit tätig ist, effizienter tun, wird von den Protagonisten in der Regel nicht geglaubt, weil sie ja ihre eigene Positionen gefährden.” (BC5)*

Even though it can be asserted that local actors have remained stuck in a particular model of water management, there is no evidence that it is “inefficient” (González Gómez and García Rubio. 2008). By briefly describing the creation of the French model of water governance, Figure 5 sheds light on the emergence of a contrasting governance model of water management. Such a comparison puts the notion of inefficiency into perspective and shows how actors' interests and shared understanding on water governance have become linked to a specific model, which in turn legitimates the interests, values and positions of actors producing this model (Bourdieu, 1994: 105).

Comparing Germany with the development of the French water sector highlights how, despite relative similar conditions at the outset, societies came to influence the development of a specific national path in each of these countries. In contrast to Germany, French urban services, including water distribution, have followed another path. Instead of creating municipally-owned public companies regulated by legal principles, municipalities have “succeed(ed) in co-operating, delegating and adjusting their actions by enlisting the aid of other partners” (Lorrain, 1992: 80). In the beginning, municipalities established cooperation with local water supply utilities. Due to financial problems, these companies did not meet the needs of local authorities (Jacquot, 2002: 33). Consequently, two companies were created in order to manage water services: the Compagnie Générale des Eaux in 1852 (Henceforth CGE) and the Société Lyonnaise des Eaux et de l'Eclairage in 1880. The creation of these enterprises was strongly supported by the French state, which has also been involved in their subsequent development. Despite their national span these companies were active at the local level by collaborating with municipal authorities.

Another contrasting point with the German path is the reluctance of the French state to develop any strong form of local government (Barraqué, 1992: 18). Hence, in maintaining the local government's weak position, the national state at the same time encouraged the development of national champions (Petitet, 2002: 27). While municipalities kept the role of organizing authorities, private operators

became increasingly large and powerful, regrouping all necessary competencies to offer turnkey contracts: “architectural and technical design, realization of secured performance, operational experience and sometimes funding” (Camilleri, 2006: 30). Progressively “a pattern of multiple partnership emerged” in order to cope with various local situations (Lorrain, 1992: 84). In contrast to Germany, regulations usually occur through contracts rather than through legal measures (Lorrain, 1992: 83). The current organizational landscape of water management in both countries is clearly the result of their particular historical developments. Thus, today we find more than 6,000 communal enterprises in Germany and, of those, around 75% are publicly owned. In France, near 75% of the water supply is managed by three private companies. This historical evolution has led to the construction of an “*école française de l'eau*” (French School of Water) with an international reputation (Jacquot, 2002: 4; Petit, 2002: 25).

To summarize, this brief comparison with the French model of urban services sheds light on several features characterizing a path development. First, the description of the French path allows us to report on how an alternative path development has unfolded. Second, this comparison shows how the different nature of the states in France and Germany (strong and central for the first, weak and decentral for the second) has largely contributed to shaping contrasting paths. Third, it results in the observation that on a common problem, namely the provision and sanitation of water, different countries developed different organizational ways of dealing with a similar problem over time, namely the local distribution and sanitation of water resources.

**Figure 5: A contrasting path: the development of the French water sector**

### *The mechanisms structuring the German water sector*

A path-dependent process is driven by positive-feedback mechanisms that constrain actors during the phase of path formation and cause them to adopt a specific course of action. In this section, I emphasize several mechanisms that influenced the formation of the German water sector and contributed to shaping its model of water management as the dominant one. Through the influence of coordination effects and complementarities as well as investment spirals, the German water sector took the form of an integrated organization under the control of local decision-makers. These mechanisms contributed to progressively excluding the participation of private companies in the local management of water services<sup>17</sup>.

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<sup>17</sup> I do not exclude the fact that other mechanisms such as adaptive expectations or learning effects did play an important role in the genesis of the water sector. However, I mainly focus on the mechanisms that were described in the various studies dealing with the creation of German urban services.



Coordination effects: Coordination effects contributed to shaping water management by introducing rules to follow and shared understandings among actors that are involved in the local water policy, therefore reducing the uncertainties between the various actors. The development of formal rules and informal principles during the phase of path formation provided an internal coherence to the various parts of the system (Miller et al., 1984), and made the interactions between the various actors inside the system more efficient by reducing the uncertainty and the coordination costs. Consequently these rules became more attractive and an increasing number of actors followed them. The emergence and adoption of this set of rules and a common understanding of how to manage water resulted in a strong internal consistency of the system. Actors had their own role fixed; behavior could be anticipated, therefore making the introduction of alternative courses of action more difficult, since they were perceived by the actors of the system as a potential source of uncertainty.

German water policy making can be characterized as a highly institutionalized sector with strong legalism. “The principle of *Rechtsstaat* also establishes the need for a complex system of legal rules with a high degree of internal consistency” (Rüdig and Kraemer, 1994: 54). The interactions between various stakeholders are influenced by a dense institutional framework that in turn left them limited possibilities to draw on alternatives. The role of the actors has been defined by various formal rules. Municipalities have to respect the Municipal Code in order to interact with the utilities, which also have to follow the Act on Municipally-owned Utilities. Compulsory use (*Benutzungszwang*), enacted by the Municipal Code, has enforced connections to the local water network and therefore represented an important barrier for potential competitors (Wanke and Kraemer, 1991: 13). Another set of rules regulates the organization of water management: the Act on Municipal Concession Tax (*Kommunalabgabengesetz*) or the Water Act (*Wassergesetz*)<sup>18</sup>. Consequently, this rigid legal structure has made the introduction of external stakeholders in the decision-making process increasingly difficult.

The organization of the German water sector was also structured by socially shared rules such as social and cultural norms. Informal rules backed the set of

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<sup>18</sup> For more details concerning the regulation of the German water management, see Freigang 2009, p. 68–77.

interrelated formal rules in the structuration of interactions between various stakeholders involved in water management. Principles such as *Daseinsvorsorge* or “public duty” (*Öffentliche Aufgabe*) strongly framed the water policy by providing actors with a common understanding about the solution to apply concerning a particular problem. Public duty refers to all the activities that have to be completed in order to fulfill the general public interest. “Municipal trading, which aims exclusively at making a profit, is incompatible with the notion of public welfare” (Wanke and Kraemer, 1991: 21). Forsthoff coined the term of “*Daseinsvorsorge*” in the beginning of the 20<sup>th</sup> century to define all activities that have to be carried out in order to meet the basic needs of the population necessary for their subsistence and well-being. These concepts have remained points of reference to justify the public and decentralized management of water in the debates on privatization. However, they have thus far not been embodied in any law and are therefore “created, communicated and enforced outside officially sanctioned channels” (Helmke and Levitsky, 2004: 727).

Institutional and organizational complementarities: During the phase of path-formation, municipalities increasingly relied on a local integrated organizational structure. Integrating urban services represented an alternative to cooperation with private companies in order to finance infrastructure. Strong complementarities affected the German water sector both at the organizational and at the institutional levels. The choice of integrating various urban services into one organization was driven by the high technical similarities between gas and water management. These similarities made it possible for local managers to create economies of scope at various levels: organizational (common administration and material resources, such as cars), technical (common supply lines, use of electricity to manage infrastructures), business (common purchasing) financial (integration of the different financial capacities), or rate advantages (common offer of different products) (Eichhorn, 1989; Braun and Jacobi, 1990; Ambrosius, 1995; Kluge et al., 2003). These benefits increased local authorities' interest in integrating further services: electricity and public transportation. For local decision-makers, this integrated organizational structure improved the coordination between various services, reinforced their control over the utility, and contributed to reducing transaction costs inside and outside the utility.

The second set of complementarities can be found in the institutional environment of the utilities. Integrating various businesses was supported by the use of cross-subsidies (*Quersubventionierung*). Following these rules, municipalities can rely on mixed calculations between the various urban services. They also obtain financial advantages through an exemption from corporate taxes (Franz, 2005: 156). As a result, local decision-makers were encouraged to adopt an integrated organizational form in order to obtain positive economic outcomes. Complementarities between the organizational form and the institutional environment were enforced by other sets of rules. Hence, the benefits from integrating businesses also validated other institutional principles such as the locality principle and contributed to increasing institutional coherence. These institutional effects influenced local decision-makers toward the path of integrated urban services and reduced the probability of cooperating with private operators, who have no interests in cross-subsidizing various services.

Investment spirals: The water sector initially required important investments in the infrastructure necessary for managing the resources (pipes, sewage and water works). Over time, infrastructure lost its value through the depreciation of the tangible fixed assets and it resulted in further investments for their maintenance. Furthermore, investments made in specific techniques are accumulated over time in order to manage these infrastructures. Competencies, developed with regard to the specific infrastructure, also constrained local managers and encouraged them to stick to their first technical arrangement. This situation, which was driven by an accumulation of investments, therefore, made the adoption of alternative technologies more difficult. Consequently, once set-up costs were committed, investment spirals constrained actors to pursue the established arrangement.

Germany is known for having water services of good quality and based on reliable infrastructure. Investment in infrastructure is generally above the average in Europe (*Branchenbild der deutschen Wasserwirtschaft*, 2011: 77). After Reunification “there was a continuously high investment in public water supply of around €2.5 billion p.a. during the 1990s and about €2 billion p.a. in the first half of this century (...). With approximately €5 billion, also the wastewater sector has invested at a high level for many years” (Wackerbauer, 2009a: 19–20). Especially during the period directly after Reunification, it was debated whether or not

investment in infrastructure in Eastern Germany was excessive (Egerer and Wackenbauer, 2006: 1). The large investments associated with the very small returns on investments make it difficult for investors to generate quick profits once the financing is committed. This specificity explains why concession contracts usually last a long time. In addition, these investments are also driven by values such as the principle of *Daseinsvorsorge*. According to this principle, it is the duty of the municipality to provide infrastructures of high quality over the long term, and to be more oriented toward sustainability for the future generations. Therefore, these high investments are carried out to meet expectations defined by such institutional principles. The two following quotations show that the degree of investment in infrastructures is deeply associated with a specific institutional logic.

*“Wir investieren jetzt, sozusagen, damit wir, also unseren Nachkommen, unseren Kinder ein Netz hinterlassen, was nicht verschuldet ist, was nicht kaputt ist, in alle Punkte, die, die wichtig sind, damit auch die nachfolgenden Generationen mit dem Netz gut umgehen können, dass Kläranlagen in Schuss sind etc....”. (LC3)*

*„Das ist die Frage von natürlicher Wirtschaftlichkeit, von ökologischer Ausgeglichenheit. Nachhaltigkeit im Sinne von Erhalten der Struktur, Erhalten des Stoffes Wasser auch für Enkel- und Urenkelgenerationen, wie nachhaltig sind die Unternehmen. (...). Die Wasserwirtschaft Deutschland arbeitet bisher immer noch nach dem Vorsorgeprinzip. Das heißt, ich mache halt vorsorgende Instandhaltungen und nicht Instandhaltungen, wenn ich merke, jetzt muss es sein.“ (PA2)*

This in turn makes the adoption of more cost-effective investments — such as those that could be offered by private operators — increasingly difficult. Even when there is competition to operate the service, foreign investors have to fulfill the expectations of local decision-makers if they want to win a bid. As described by a manager of a private company, adopting a strategy of cost-reduction in infrastructure investments may represent a disadvantage in case of a competition.

*“Et la critique qu'on avait de la part de consultants de l'Ouest, c'était de dire: "Mais attendez vous êtes en train de construire un projet au rabais. Vous vendez à la ville de Rostock une station d'épuration au rabais. Parce que tout simplement, nous on avait une gestion des investissements qui était beaucoup plus volontariste que celle à laquelle les Allemands sont habitués. Les installations sont très riches, très sur-dimensionnées etc. Ce qui est très bien si vous acceptez de payer cela. Et donc le prix de l'eau est en moyenne beaucoup plus cher en Allemagne qu'en France parce que les normes sont beaucoup plus contraignantes et il y a la volonté d'avoir des investissements sur-dimensionnés”<sup>19</sup>.” (PO4)*

On the whole, these fixed costs have been an important economic entry barrier for potential entrants (Clausen and Rothgang, 2002, 9–10) and secure the actors that committed these investments a dominant position inside the system. This dominant position is also reinforced by investment in specific techniques. Theoretically, new entrants have to compete with powerful established actors relying on political relationships and on financial power (Loske and Schaeffer, 2005: 15).

#### *The stakeholders involved in water services*

Having described the origins of the German water system and shed light on its various constitutive mechanisms, I now focus on the different actors that constitute this system. These actors have contributed to putting in place the mechanisms structuring the path its formation, and their relationships are also influenced by these mechanisms. Overall, water management can be regarded as a classic pluralistic domain involving divergent objectives and multiple actors linked together in complex power relationships.

The political actors: According to the subsidiarity principle, competencies in water policy are shared among three levels: the federal state (*Bund*), the federated states (*Länder*) and the local level. Due to the decentralized nature of the German federal state, the federal government does not have a great influence on the formulation and implementation of new policy measures. Thus, the role of the

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<sup>19</sup> “And the consultants from West Germany criticized us and said: ‘But wait, you are building a discounted project. You are selling a discounted sewage plant to the city of Rostock.’ Because we had simply a management of investments which was much more proactive than the Germans were used to. The facilities are very rich, very oversized, etc. This is very good if you accept the price. Consequently water prices are on average much higher in Germany than in France because the norms are much more constraining and there is a will to have oversized investments” (Own translation)

federal government is strongly restricted in matters of water legislation. Besides regulating the legislative activity of the states (*Länder*), its function is to transpose the European directives into national laws. The federal ministry of economy is generally in charge of the water policy formulation. By contrast, the federated states have an important function in water legislation. By translating federal laws into state laws, they define the institutional framework in which municipalities can act. This task encompasses both water regulation (*Landeswassergesetz*) and the legal framework that mandates the organization of the water management (*Kommunalgesetz* and *Eingebetriebgesetz*). In addition, German states are responsible for monitoring water management at the local level (financial, environmental, water prices). Various state administrations (state administrative authorities (*Regierungspräsidium*), state ministries for environment and agriculture, state ministries for Health, cartel administrations) are in charge of carrying out these tasks.

Among the different levels of government involved in water management, the local level represents the most important one. Through the principles of self-government (Art. 28 of the German Constitution), municipalities are free to organize their water management and have authority and responsibility over these water services. In addition, they are allowed to develop their own laws in the form of by-laws (*Verordnungen*) and statutes (*Satzungen*) within their administrative authority (Wanke and Kraemer, 1991: 13). They are therefore key actors in the water policy.

*“Municipalities, as a rule, are the central arena for conflicts of interest and bargaining processes.(...). Individual with conflicting water policy interests are often heterogeneous and can only be analyzed, weighed and judged adequately against the background of a specific context. (...) The local level is also the level at which conflicts of use between industrial consumer and public water supply become evident.” (Wanke and Kraemer, 1991: 2)*

Despite their large autonomy, municipalities have to coordinate their activity with their state government. Furthermore, municipalities usually have to cope with economic and financial problems since their revenues do not cover their needs. This situation increases their dependence on state governments and leaves them to be influenced in their policy planning and implementation, which in turn may lead to conflicts between the federated states and the municipality. In several cases, municipalities manage their water utilities with third partners, either through direct

participation or through collaborations within a water association (*Wasserverbände*) that includes other municipalities. While such collaborations may improve water management by for instance creating economies of scale, they may also lead to conflicts of interest between the various partners and therefore make the governance of the utility more difficult.

The economic actors: Alongside the city council, which is usually responsible for the implementation of local water policy, municipal utilities carrying out water services represent another central actor in local water policy-making. These utilities may generally be regarded as an instrument of the city council since they have to implement its decisions. Depending on the local context and the interests of local decision-makers, the city council can choose among various organizational forms in order to perform this task. The decision over a specific organizational arrangement in turn affects the control the council will have on the utility. While a municipality is free to choose the organizational form for water distribution, the organization of sanitation, considered an obligatory duty, is largely constrained by state regulations because of public-health concerns. Table 6 summarizes the various legal forms a municipal utility can take and describes in each case the specific relationships between the utility and the city council. The two first legal forms represented a standard for municipal utilities until the 1990s. After that, municipal utilities have started to adopt private legal forms (Musiolik, 2007: 77).

<b>Legal form</b>	<b>Attributes</b>
Municipal department ( <i>Regiebetrieb</i> )	<ul style="list-style-type: none"> <li>• <b>Character:</b> Integration of technical and human resources in the administration and within the municipal budget</li> <li>• <b>Legal Basis:</b> Municipal law</li> <li>• <b>Body:</b> No body; part of the city administration</li> <li>• <b>Municipal control:</b> Through directive of the administration or council's decisions</li> <li>• <b>Partnership:</b> Not possible</li> </ul>
Municipally-owned company ( <i>Eigenbetrieb</i> )	<ul style="list-style-type: none"> <li>• <b>Character:</b> Enterprise without legal entity but independent from the municipal budget and managed under business principles</li> <li>• <b>Legal Basis:</b> Municipal law and Ordinance on Municipally-Owned Enterprises</li> <li>• <b>Body:</b> Management committee / Work council</li> <li>• <b>Municipal control:</b> Through Work council, Right to issue instruction and supervision of the direction of administration toward works management</li> <li>• <b>Partnership:</b> Not possible with private companies, possible with other municipalities through water associations</li> </ul>

Public Corporation (AöR)	<ul style="list-style-type: none"> <li>• <b>Character:</b> Legally independent entity</li> <li>• <b>Legal Basis:</b> Municipal law</li> <li>• <b>Body:</b> Management board / Administrative board</li> <li>• <b>Municipal control:</b> Through administrative board, management board works independently (No right to issue instructions)</li> <li>• <b>Partnership:</b> Not possible with private companies, possible with other private companies through water associations, participation of the AöR to another utility is possible.</li> </ul>
Water Association (Wasserverbände)	<ul style="list-style-type: none"> <li>• <b>Character:</b> Legally independent entity with public status</li> <li>• <b>Legal Basis:</b> Municipal law, State law on municipal collaboration</li> <li>• <b>Body:</b> President of the association/ Assembly of the association/ Administrative board (optional)</li> <li>• <b>Municipal control:</b> Through the Assembly, Municipalities have the right to issue instructions</li> <li>• <b>Partnership:</b> Participation of third party possible</li> </ul>
Companies with limited liability (GmbH)	<ul style="list-style-type: none"> <li>• <b>Character:</b> Legally independent entity with private status</li> <li>• <b>Legal Basis:</b> Private law, especially GmbH law</li> <li>• <b>Body:</b> Executive Director(s), Shareholder's meeting, supervisory board (optional)</li> <li>• <b>Municipal control:</b> Through shareholder's meeting, which has the right to issue instructions to the direction, through supervisory board, several businesses need the approbation of the city council</li> <li>• <b>Partnership:</b> Participation from third party possible</li> </ul>
Joint-stock companies (AG)	<ul style="list-style-type: none"> <li>• <b>Character:</b> Legally independent entity with private status</li> <li>• <b>Legal Basis:</b> Private law, especially AG law</li> <li>• <b>Body:</b> Executive Direction, Shareholder's meeting, supervisory board</li> <li>• <b>Municipal control:</b> Through supervisory board, no right to issue instructions, no authority toward the directors, no right of instruction from the city council toward the supervisory board, direct influence of the Shareholder's meeting toward the direction is not possible</li> <li>• <b>Partnership:</b> Participation from third party possible</li> </ul>

**Table 6: Legal forms of the municipal utilities (Source: Rottmann, 2006: 124–126)**

As specified in the table above, a municipal utility can take the public form of a municipal department (*Regiebetrieb*) or a municipally owned company (*Eigenbetrieb*), which is more independent than the municipal department but still remains under the influence of the municipality and is more constrained by state regulations. Municipalities also have the possibility to organize water distribution under a private legal form, while the city council remains the sole shareholder. In this case, the utility's board of directors is more independent, has more economic flexibility and the local government has less influence over the utility. Among these private forms, a distinction has to be made between joint-stock companies (*AG*) and companies with limited liability (*GmbH*). The former gives managers more independence than the latter, since they are, according to the joint-stock law, the sole actors responsible for running the corporations (§ 76.1 AG law). In contrast, in a



company with limited liability, the municipality is able to intervene — for instance through by-laws — directly in the activity of the utility (§ 45-46 GmbH law).

Independent of their legal form, municipal utilities are regarded as central economic drivers (important employer and investor) at the local and regional levels. First, they are an important employer at the local level. Second, as these utilities are generally not vertically integrated, they represent an important client for local suppliers of services and technologies (equipment manufacturers, engineering and consulting offices, pipes and building companies, component manufacturers, chemistry companies, laboratories, local universities). Usually, water utilities attempt to conclude the majority of their contracts with local businesses. Although such contractual relationships have been challenged since 2004 by the recent European Commission's regulation on public procurement, utilities are still crucial actors for the development of the local economy.

Interest groups and professional associations: Germany is a strong corporatist state, where professional associations play a crucial role in policy-making. “*Die Leitidee des Korporatismus beinhaltet, daß stabile Verhandlungssysteme zwischen Staat und einer Begrenzten Anzahl von “großen” Verbänden existieren, welche nicht alleine Interessen Vertreten, sondern in die Erstellung öffentlicher Güter einbezogen sind*” (Sack, 2008: 75). These associations contributed to the formation of the German water system and the standardization of its management. In addition to the state regulation that a municipality has to respect, technical and political associations have also influenced local water management. On the technical side, the German Association for Water, Waste Water and Waste (*ATV-DVWK, now merged into DWA*) and the German Association for Gas and Water (*DVGW*) enacted the technical norms, rules, and certifications for distribution and sanitation. The *DVGW*, which was founded in 1859, played a crucial role in the formation of the *Stadtwerk* model. From its creation until today, these professional associations have exerted a great influence on German water policy (Kahlenborn and Kraemer, 1999: 136; Clausen and Rothgang, 2002: 12). According to Rüdiger and Kraemer, these associations are “the law”, since the technical regulations they produce are translated into various policies and guide decision-makers.

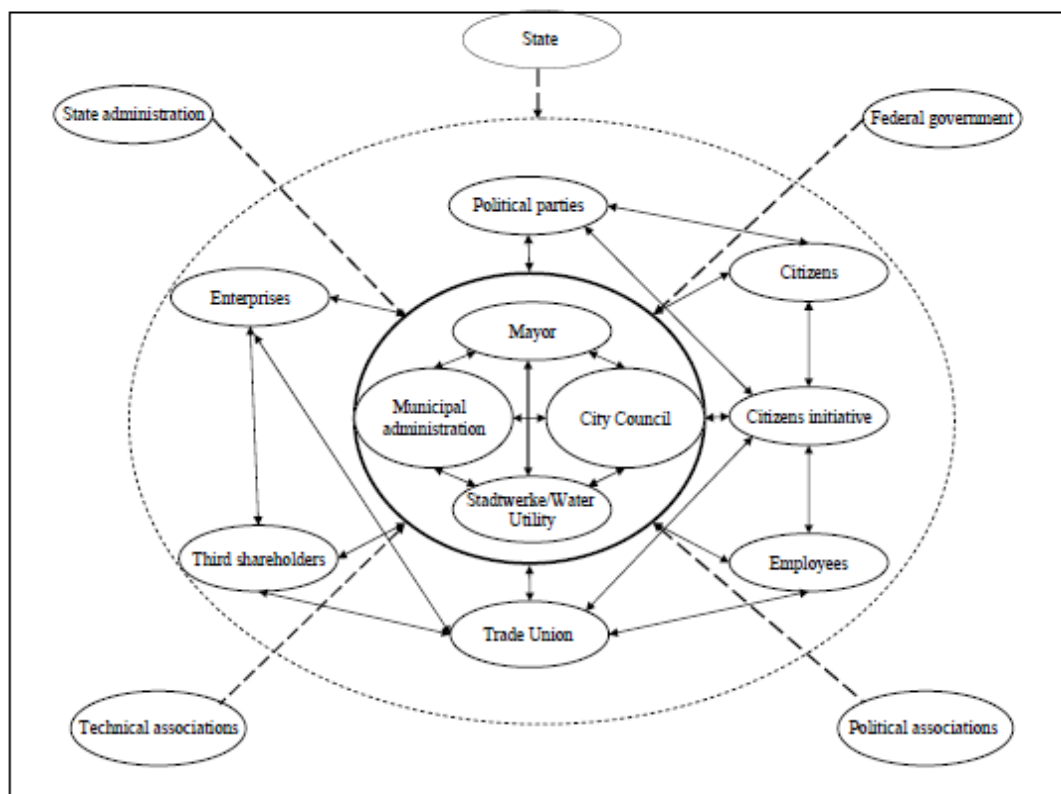
On the political side, there are numbers of organizations that represent the interests of stakeholders involved in the local water services. The Association of

German Municipalities (*Dst*), and the German Association of Towns and Municipalities (*DstGB*) defend the interests of the municipalities, and the Association of Municipal Utilities (henceforth *VKU*) defends the interests of the utilities. These associations, in addition to bringing consulting and know-how to their members and to representing an exchange platform, are also very active in lobbying at the national and European levels. The interests of both the public and the private water industry are represented by the Federal Association of Gas and Water Industries (*BDEW*, formerly *BGW*). Recently, the Alliance of Public Water Industry (*AöW*) was created in order to defend the interests of the public water utilities, since increasing numbers of private operators are involved in the other associations (*PA4*). While these actors are not directly involved at the local level and in the dynamics of public-private partnerships, they have played a crucial role in the creation and the maintenance of the German water system. Many of these associations contributed to shaping this model and also defend it at the national and the European level.

In addition to these professional associations, various associations of consumers also influence water policy-making at the local level. For instance, increasing numbers of citizens' initiatives have been founded at the local level in order to hinder partial privatizations of municipal utilities. These local coalitions, which are made up of heterogeneous actors (active citizens, employees of utilities, political actors, trade unions), and supported by associations such as *ATTAC* and by political parties (the Greens and the Left), act with the purpose of defending the interests of the citizens. Relying increasingly on citizens' initiatives (*Bürgerbegehren*) and local referendums (*Bürgerentscheid*), they influence local water policy processes and therefore represent decisive actors in German water governance (Rehmet and Mittendorf, 2008).

In total, German water policy is the product of a dense and coordinated "interaction of a complex web of actors located at federal, land and local level, with horizontal cooperation at land and local level being of particular importance" (Rüdiger and Kraemer, 1994: 73). Although influence over water policy in Germany is largely fragmented between a great numbers of actors, it is worth noticing that the relationship between the municipality and its utility is central to the local system of action. Figure 6 sheds light on the complex configuration of the German water

system, a system whose interdependencies between three groups of actors — political actors, economic actors and groups of interests — are regulated by a strong legal framework, making the introduction of “outsiders” into the water policy process very difficult. Within the inner circle, the central actors of the local water policy are represented. The interdependencies between these political and technical actors are crucial for keeping the system stable. The municipal utility has to provide financial benefits to the municipality and secure the reputation of the city council and the mayor toward the citizens. In exchange, the utility’s management keeps autonomy in controlling the utility. The actors within the outer circle are peripheral actors and are directly involved in the local water policy. A great number of political and financial interrelationships link them to the central actors and influence the interdependence between these actors. Finally, the actors in the periphery influence the context in which the local actors intervene. They define technical and political norms and may exert political and financial pressures on the municipalities. This figure represents an ideal-type of the German water system, whose consistency varies from one local configuration to the other.



**Figure 6: The stakeholders of the German water system**

## **Chapter 5: The recent development of the German water sector: field continuity despite environmental changes**

Since the 1990s, the German water sector has been facing an increasingly competitive environment and a great number of criticisms concerning its organization. In a context of post-Reunification, globalization, and general municipal economic crisis, German water services have been challenged by growing liberalization pressures from the European Commission and by the introduction of private alternatives to the public and local model of urban services (Wollmann, 2002). However, the German water sector has been characterized by a striking continuity in its organization and mode of governance. Theoretically, this chapter emphasizes the stability at the field level despite pressures to change and confirms the assumption of a path-dependent process characterizing the German water sector. This chapter sheds some light on the key parameters of the system that changed and the intrinsic properties that remain stable. In sum, changes have in general been carried out in organizational practices and structures, whilst the general logic of the system as well as its dominant pattern of governance and regulation has remained stable.

### **The German water sector in a post-Reunification context**

#### *The impact of Reunification and energy liberalization on the German water sector*

In the 1990s, two main crises affected the German water sector: Reunification and the deregulation of the energy sector conducted at the European level (Lorrain, 2005a: 256). During this period, municipal utilities had to cope with pressures toward “an increasing market opening, a commercialization, processes of market

concentration and privatization and change in the demand structure and — quantity — above all in the territorial repartition — and new marketability of system alternatives, especially of semi- and decentralized distribution and disposal techniques” (Libbe and Moss, 2007: 381).

Following Reunification, Eastern German municipalities had to deal with an extensive reorganization of the local public services. Under the former GDR regime, the *Stadtwerk* model was dismantled. The various urban services were organized and managed independently from each other. Water services were centralized at the level of 14 regional districts (*Bezirk*)<sup>20</sup> and organized in combines (*Kombinat*) under the legal form of socially-owned enterprises (*VEB*). The responsibility for the management of such services was progressively transferred from local authorities to the environment ministry<sup>21</sup>. Even if water services remained in public hands, municipalities thereby lost their competencies in water management over three decades. After Reunification, the former East German administration was reorganized under the West German administrative principles: The administration at the federated state level had to be set up again; the municipal authorities recovered their right of self-government. The transfer of ownership to the municipalities was under the responsibility of the *Treuhandanstalt* (Henceforth THA), which strived to sell the former combines to private investors. This transfer of ownership took place differently depending on the sector and the municipality with whom the THA had to deal. Although a great number of sectors were partially sold to private investors instead of being given back to the municipalities (for instance, the energy sector), the property associated with the water infrastructure was generally given back to the municipalities. While the Act on Municipal Property (*Kommunalvermögensgesetz*) secured the property transfer of water infrastructure to municipalities, THA attempted to influence the municipalities to sell their water services to private investors. Nevertheless, a great number of municipalities stood against the privatization of municipal water services. In general, water services were transferred back to local ownership.

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<sup>20</sup> This administrative level was created in 1952 and replaced the previous division into federated states.

<sup>21</sup> In 1952, municipal companies (*Betriebe der örtlichen Wirtschaft*) were created and placed under the supervision of a district commission (*Bezirkstag*). In 1956 the process of centralization started through the nomination of a company by region (*Technischer Leitbetrieb*) to guide and advise other local businesses. In 1962, companies were created for each district (*Kreiswasserwirtschaftbetriebe*) (Kraemer, 1992).

This period was also characterized by an important decrease in infrastructure investment, which resulted in a neglect of maintenance and repair, as well as a failure to keep up with the latest technical standards. In the period following Reunification, German municipalities and their new utilities needed not only to make huge investments in replacing and modernizing water infrastructure, they also lacked competencies in the field of water management. Although Western German actors (officers, mayors, consultants, professional associations) attempted to influence the decision-making in Eastern German municipalities, local decision-makers in charge of the water services could cope with this situation by relying on alternative ways of organizing their water services. As an interviewee explained, during the period following Reunification, these local decision-makers were more open to adopting new solutions concerning their water services, including private models of water management.

*“Während in den neuen Ländern man eben eine Nulllinie hatte, wo man gesagt hatte, wir denken mal von diesem Nullpunkt aus, welche Modelle gibt es denn? Deswegen haben sich manche, es sind ja nicht viele, manche auch entschieden und gesagt, wir können auch mal so eine Privatisierungsoption ziehen.” (PA1)*

The second crisis experienced by German municipalities was the deregulation of the energy sector. Depending on the local organization of urban services, the impact of energy liberalization was either direct or indirect. Integrated municipal utilities have been directly affected by the liberalization of the European energy sector through the direct participation of energy operators in the local water management. By forcing municipal utilities to drop their energy prices in order to remain competitive, the energy deregulation affected utilities' income as a whole and thereby increased the financial pressures on water services. When the water utility had always been managed independently from the other urban services, the influence of the liberalization was more diffuse and instead took the form of policy learning — that is, change conducted in the water utility in order to prepare for a future liberalization (Freigang, 2009: 30). Deregulation was accompanied by the idea that cross-subsidies were disrupting the competition since it gave a competitive advantage to the utilities in that it allowed them to reduce their corporate taxes and enabled them to compensate for the losses of one business with the profits of the other ones. The European policy on energy deregulation enforced the unbundling of

the energy sector — that is, the organizational separation of networks and distribution. This measure also affected integrated municipal utilities through the compulsory internal reorganization of the various businesses (Scheele, 2005: 169). Actors, who used to rely on national and state rules in order to manage local urban services, had to deal with the introduction of a new regulatory framework, which contributed to uncertainty in the cooperation between the established actors.

#### *Criticisms of the German water sector*

In a changing ideological context, in which the liberalization and privatization of public services was increasingly accepted, political actors debated the reliability of the German water sector. Through the introduction of market mechanisms and the cooperation with private partners, municipal water utilities were expected to gain in efficiency and therefore be more capable of fulfilling their public duty. In the early 1990s, the influence of the “New Steering Model”, the German variant of the New Public Management model, began to influence the German public sector. Based on the assumption that private organizations are more efficient than public ones, this program strived to make public sector organizations adopt private management practices and structures. It contributed for instance to supporting “a contractual approach to public services delivery, instead of relying on a rules-based administrative approach” (Hebson et al., 2003: 482). One of its purposes was to transform the organization of the public services from state-run administrative departments into independent public utilities by reducing hierarchies, introducing more autonomy and responsibility at lower levels of decision-making, and by setting up cost-efficiency mechanisms (Wollmann, 2000). Public sector organizations also increasingly focused on the cost-efficiency aspects. As part of the public administration, water utilities were directly affected by this program, which contributed to a large extent to the diffusion and normalization of practices coming from the private sector throughout the German water sector.

This period was also characterized by changes in the water sector at the international level. In general, the decade spanning 1990–2000 was seen as liberal. At this time, a belief in the beneficial effects of privatization enjoyed increasing acceptance. In 1989, the privatization of the British water sector led to the internationalization of British water operators, which contributed to enlarging the

number of private operators active in the water sector worldwide. Before that, French private operators were the only corporations that had developed internationally and had therefore remained exceptions. For the first time though, this development was accompanied by an argumentation legitimizing the activity of private operators in the water sector (Lorrain, 2009: 3). This work of legitimization was encouraged by international institutions such as the World Bank (Goldman, 2007). This neo-liberal ideology largely inspired European policy in its quest to open the national markets and increase competition (Wollmann, 2002: 32). As the public service markets had been opened to competition, consulting firms also increased their activity in this area and became a central actor in all the important transformations of urban services, such as public private partnerships (Henceforth PPP), mergers and acquisitions, and stock market listings. Lorrain (2011: 1115) provided an overview of the actors involved in these transactions.

Political debates on water privatization started in Germany during the 1970s. However, a fresh upsurge of criticisms of the German model of water management emerged during the middle of the 1990s (Hames and Krüger, 1999). In 1995, the World Bank criticized the German water sector and claimed that its historical organization in multiple local and public companies was inefficient. They encouraged the introduction of private operators in order to cope with this problem (Briscoe, 1995). Whilst these criticisms were sharply contested by European experts (Barraqué, 1998; Hames, 1998), debates on water privatization were echoed at the national level. Pressures to adopt new management practices and regulation instruments from other countries and sectors influenced the debates on reforming water management. In 1998, a reform of the cartel law (*Gesetz gegen Wettbewerbsbeschränkungen*, GWB) was undertaken. The §103, which used to secure the exclusive concession agreements and the geographical demarcation agreements between provider and local utilities, was abolished for gas and electricity. Following this reform, the decision on whether to maintain this clause for the water sector was the subject of heated debates (Schwarz, 2001: 395). In 2001, a group of experts published a report requested by the German federal economics ministry, which recommended the introduction of competition into the water sector in order to increase its efficiency (Ewers et al., 2001). Based on international experiences of privatization and on the previous liberalization of energy, transport, and



telecommunication, the goal of this report was to develop a strategy for the German water sector in order to make its organization more compatible with the European policy on public services. All in all, these international experiences of private sector participation, above all the French and English ones, showed German decision-makers that a municipal utility under public ownership was not the only option and gave arguments to proponents of privatization in Germany.

The European Commission also exerted important pressures on public services, including the German water sector. Its criticism of the German model specifically concerned its fragmentation, its inefficiency, and its lack of competition. In other words, it put the main characteristics of the German water sector into perspective — that is, its public, local and integrated organization. The debates on a water sector deregulation led national governments to prepare for such a scenario since the European Commission aimed to open this sector to competition (European Commission, 2003: 13). The commission actively supported a competition model for the local market (*Wettbewerb um den Markt*). This model did not entail a direct liberalization of the sector and a direct competition for the end user, but rather the introduction of competition through compulsory calls for tender. One goal of this model was to force local decision-makers to open the management of local water services to different competitors and to allow decision-makers to choose the most efficient alternative. This policy would in turn impede the automatic renewal of the concession contract between the municipality and the municipal utility, since the utility would have to compete with other companies for the concession contract. This policy directly threatened the principle of self-government in reducing municipalities' scope of action and limiting its freedom in the choice of an appropriate ownership model, as is prescribed by the German constitution. The municipality would no longer be able to choose whether it wants to manage the utility alone or with a private partner.

*„Indem man sagt, da müssten wir eigentlich noch ausschreiben und hier müssten wir ausschreiben, und die Kommunen können nichts mehr sagen, oder es stand in der Gefahr, dass die Kommunen irgendwann nicht mehr sagen können, für uns das beste Modell ist dieses und deshalb führen wir es auch so aus.“ (PAI)*

Two main arguments structured the debates on a German water sector's reform: first, the high prices of German water services were denounced by a great number of

stakeholders. Second, despite the high quality of German water technologies, the absence of German operators at the international level was perceived as a problem. Most of the privatization proponents argued that fragmentation in small operators was inefficient and had to be reformed.

However, the European Parliament argued against water sector liberalization through its reply to the European Commission of March 2004 concerning its internal strategies for 2003 to 2006. Instead, the parliament supported a modernization characterized by the adoption of cost-efficient and environmentally beneficial practices, while preserving the vertically integrated structure of municipal utilities. Ultimately, the European Union exerted pressures on the German model of urban services in criticizing the use of cross-subsidies. The European authorities considered this instrument — which is the basis of the German integrated model of urban services — to be a distortion of competition and therefore incompatible with the European Union competition law (Höpner, 2006), which aims to ensure free competition and fight against corporations abusing of their market power or monopoly situations for the good of the end consumer.

### **The growing participation of private operators in the ownership of German municipal utilities**

The need for investment in infrastructure in Eastern Germany, the European liberalization of energy and public transportation services, as well as the growing acceptance of private management practices for public services represented a facilitating context for the introduction of private operators in the German water sector. While Reunification gave water operators the opportunity to gain a foothold in Germany, the deregulation of the energy sector led to the diversification of the energy operators, whose interest in local water management also increased.

#### *The development of private operators following Reunification*

During the first years that followed the fall of the Berlin Wall, several private operators started to explore business opportunities throughout the former Eastern block, including Eastern Germany. In the water services, the potentially new market attracted both German interests, such as Gelsenwasser, and international interests —

French and English ones, represented by Thames Water, Compagnie Générale des Eaux (CGE) and Lyonnaise des Eaux (LdE). These companies proposed a competitive alternative to the typical German model of urban services.

*“Also, die Engländer wollten ähnlich wie die Franzosen hier in den deutschen Markt rein. 1989 sind die englischen Wasserversorger privatisiert worden, unter Thatcher noch. Und die wollten dann gleich hier, international, und da war in Deutschland die Wende und es gab Nachholbedarf in Kläranlagen und natürlich war dann ein toller Markt da.” (BC7)*

In 1992, after Thames Water had taken over the environmental project contractor Umwelttechnik AG Halle — a former combine mainly in charge of the planning and building of water and waste treatment plants — the English operator abandoned its activity in the German water sector in 1997. In contrast to Thames Water, the French operators have kept attempting to develop their participation in the water sector in this region. Due to their financial power and expertise in coping with problems of water management, they were expected to be suitable partners for Eastern German municipalities. Along with their internationalization course, the boards of directors of the two French enterprises both decided soon after the fall of the Wall to send managers to explore the potential market possibilities and to convince local decision-makers of the reliability of their cooperation models. In the beginning, the strategies of both operators were quite similar. First, each operator created a partnership with a German company in order to improve their image among local decision-makers. Such a partnership was meant to support German operators in developing a business in the water sector, while making the expansion of French operators in Germany easier.

*“Und die damalige Entscheidung war aber, es nicht alleine zu versuchen, sondern weil man den Markt nicht so gut kannte, das mit einem Partner aus Deutschland zu machen. (...). Und diese gemeinsame Arbeit mit der VEBA Kraftwerk ging bis 1998. 1998 haben wir [Vivendi, now Veolia] dann die Anteile von VEBA Kraftwerk übernommen.“ (PO2)*

*“Et donc il se trouve aussi, hasard des rencontres de patrons, que Jérôme M. était actif dans l'European Round Table. Ils se réunissaient avec un certain nombre de patrons et il a rencontré un monsieur qui était directeur de Thyssen et ils ont parlé de l'eau, Thyssen vend des tubes pour l'eau, nous on exporte de l'eau. Ils ont parlé et comme le mur de Berlin était tombé, ils se sont dit pourquoi on ne ferait pas quelque chose ensemble et donc c'est les gens de Thyssen qui ont organisé une séance d'information à la foire de Leipzig. ”<sup>22</sup> (PO5)*

The main concern of these private operators was to convince local decision-makers of the worthiness of the delegation model. Contacts with municipalities were supported by the work of key actors from the former East German administration. In parallel, managers visited various cities, where they discussed their model with local decision-makers.

*“On a prospecté absolument tous azimuts. Nous avons un collaborateur Allemand qui s'appelait Dieter D. qui était issu directement du ministère de l'environnement Est Allemand, où il occupait une position élevée. A la chute du mur, nous l'avions engagé et il avait bien entendu des rapports avec tous les directeurs de VEBWAB de tous les Bezirke Est-allemands et donc on a fait la tournée. (...) On a été absolument partout. Je m'étais amusé une fois à compter en l'espace de deux ou trois ans, on a fait à peu près 350,000km en voiture sur le territoire de l'ancienne Allemagne de l'Est, donc quand vous voyez la taille du territoire, je peux vous dire qu'on a vraiment été partout”<sup>23</sup>. “(PO6)*

These operators also came into contact with key decision-makers at the state and federal levels in order to facilitate collaborations with local authorities. In addition to meetings with national stakeholders, such as with the German ministry of finance, the managers met the minister-presidents of the newly created states in order to discuss the regulatory framework. They also established relationships with the *Treuhand Anstalt* (THA), the organization responsible for the management and privatization of the former combines.

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<sup>22</sup> And Jérôme M. was also active in the European Round Table. It was a meeting of managers, where he met a man, who was manager in chief of Thyssen. They spoke about water. Thyssen sells pipes for water, we export water. And as the Berlin wall had fallen, they thought about doing something together and the managers from Thyssen organized an information meeting at the Leipzig trade (Own translation).

<sup>23</sup> We went everywhere. We had a German collaborator, called Dieter D., who had held a high position in the GDR ministry of environment. After the fall of the Wall, we hired him because he had relationships with all the managing directors of all the VEBWAB in the GDR. And we did a tour (...). We went absolutely everywhere. During two or three years we did around 350000km by car on the former territory of the GDR, and when you see the size of the territory, I can tell you that we have been everywhere (Own translation).

*“On avait quand même des relations avec le gouvernement Allemand et il y avait à l'époque un organisme, la Treuhand, on a été les voir. M. a été voir l'ambassadeur d'Allemagne réunifiée après pour parler de notre affaire à Rostock. On a été voir le ministre des finances de l'Allemagne, Theodor Waigel au moment de la passation du contrat. ”<sup>24</sup> (PO5)*

In line with the European Commission's position, private operators did not advocate for the takeover of the the infrastructures themselves or even of the water resources, but saw themselves as a means for improving the management of the organization and therefore expected to increase gains of productivity. This would include changes in management practices and the introduction of technical experts in management boards, which are usually dominated by local politicians. This view is based on the assumption that public monopoly situations have no incentive to improve their management and the policy influences in the management largely impede a cost-efficient management of the utility.

*“Rien ne vous pousse dans un système de Stadtwerke à essayer d'optimiser les investissements ou à faire des gains de productivité. Et donc si il n'y a pas de demande politique de faire des économies pour être plus compétitif, c'est sûr que dans un système très construit, très performant sur le plan des qualités de services, y a pas de demandes pour des entreprises comme les nôtres qui pourrions apporter des vrais gains de productivité en Allemagne de l'Ouest. ”<sup>25</sup> (PO4)*

Through their cooperation with municipalities, private operators expected to increase the efficiency of utilities through technological innovation, the creation of economies of scale but also “partly through removing social policy goals from water policy such as employment generation or (more commonly) wealth redistribution through cross-subsidy” (Bakker, 2003: 42). For these operators, profit-oriented behavior does not impede the achievement of the utility's environmental goals, but is rather a driver for carrying out these goals more efficiently.

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<sup>24</sup> We had relationships with the German government and at that time, there was the Treuhand. We went to see them. M. went to see the ambassador of the unified Germany after that to speak about our business in Rostock. We went to see the minister for finance, Theodor Waigel, during the process of contracting

<sup>25</sup> In a system like Stadtwerke, nothing pushes you to try to optimize the investments or to increase the gain of productivity. And when there are no political demands to make economies and to be more competitive, it is certain that in such a good and effective system on the quality side, there is no place for companies like ours, who could really enhance the output in Western Germany.

Following Reunification, both French operators sought to expand their business in Germany. Nevertheless, their strategies have diverged to a large extent. Following its course of internationalization, LdE attempted to develop its Eastern German business directly after the Fall of the Wall (Lorrain, 2005b), whereas the first years of the CGE were not as dynamic. The LdE, supported by its partner Thyssen-Krupp, sent managers to visit in the Eastern German municipalities and to make contact with local decision-makers. As it was the case at the international level, in Germany the LdE had a head start over its rival, the CGE. CGE changed its strategy in order to expand its business more efficiently throughout Germany. This change in the strategy of the operator occurred just after Veolia had won — together with RWE and Allianz — the bid in Berlin, which in turn represented an investment of 1.7 billion euros. In the beginning of the 2000s, Veolia progressively started —with the approval of the Paris head office — to compete for the takeover of *Stadtwerke*. With the support of the public transportation and energy businesses of Veolia, Veolia Water developed its multi-utility activities in Germany. It first won a bid in Görlitz in 2001. Two years later they took over a part of the Weisswasser utility, followed by the takeover of the Braunschweig utility in 2005. This change of strategy was seen by Veolia's managers as the only opportunity to gain ground in the German water sector. They could thus expand their business in the water sector by competing for *Stadtwerke* and without relying on a partnership with an energy operator. In contrast to Veolia, LdE decided to remain focused on its development on the German water market. In the end of 2011, Suez-Ondeo announced its intention to sell its German subsidiary Eurawasser (a former subsidiary of LdE and Thyssen-Krupps) to Remondis — a German group specialized in environmental services — for €95 million and therefore decided to abandon its business in the German water sector.

**Figure 7: The various strategies of French global players in the German water sector**

Over the years, French operators succeeded in breaking into the water sector throughout Eastern Germany by cooperating with several municipalities (Rostock, Döblen, Potsdam, Berlin, Schwerin, Görlitz, etc.). However, the potential for market development became increasingly limited for the French companies and market evolution did not live up to the private operators' expectations. While private operators designated Germany in the middle of the 1990s as “a market of the future” (Hahn, 1999: 9), these operators came across a great number of business expansion problems. A first problem is that the *Stadtwerk* has progressively become the dominant model of urban services in Eastern Germany, which undermined the diffusion of public-private partnerships. Various actors from Western Germany, such as professional associations, supported the diffusion of the *Stadtwerk* model throughout Eastern Germany. The *Stadtwerke*'s formal structure also represented a

difficulty for these French companies specialized in water services. As several interviewers stated, within a typical integrated utility, the water business represents only around 10% of the whole business volume. Ultimately, the cooperation with German companies, which was seen as the beginning as a strategic advantage, has eventually impeded the further development of French operators in Germany because of conflicting strategic interests. Figure 7 (above) describes the strategies of the French groups in the German water sector since Reunification.

*The development of private operators following energy liberalization*

The waves of liberalization in the European energy sector have also indirectly affected the German water sector. First, deregulation impacted the strategy of the German energy operators and second, it affected the relationship between these operators and the municipal utilities. Deregulation first resulted in a process of concentration through mergers and acquisitions, where the nine operators that dominated the German energy sector were reduced to four (E.ON, EnBW, Vattenfall, and RWE). Second, the German energy providers now had the opportunity to expand their businesses to include the local supply of end consumers. Before energy liberalization, the provision of energy to the end consumers was exclusively in the hands of municipal utilities. In a liberalized market, energy operators could directly access the end consumer by competing with municipal utilities or through the take-over of municipal utilities — thereby extending their value chain.

*“Die Stromversorger, wie E.ON und RWE haben diese Anteile nur gehalten um Einfluss auf ihr Stromgeschäft zu behalten. Das Interesse am Wasser war gar nicht so gegeben; die sind ja Zulieferer teilweise für die Stadtwerke, was Energieversorger anbetrifft. Da wollten die einfach ihren Fuß drin halten, dass die mehr oder weniger die Preise bestimmen konnten für die Abnahme. Das betraf Gas und hauptsächlich Strom.” (BC7)*

In parallel to this vertical integration, German energy operators have sought to perform a horizontal integration. The recent change in the international water sector and the liberalization of the energy sector pushed the German energy operators to engage in a diversification strategy and to invest in this sector (Lorrain, 2009: 5). During this period, the water sector gained in strategic importance for them. As the water sector was part of the infrastructure services, energy providers expected to

create synergies from the proximity of both sectors, for instance, from the client relationship. The participation in the water sector, which used to occur as a consequence of takeover of the energy sector at the local level, became a strategic business.

*“Die Energieliberalisierung hat dazu geführt, dass die ehemaligen Monopolunternehmen nicht mehr sicher sein konnten, ob ihr Geschäft so weiter läuft wie bisher. (...). Diese Unsicherheit der deutschen Unternehmen hat zu Diversifikationsbestrebungen geführt und Wasser war eine Diversifikationsbestrebung.“ (PO7)*

In the course of diversification, these operators aimed to take the form of multi-utilities. Hence, German energy providers were increasingly interested in the management of local water utilities and took over increasing numbers of shares in municipal utilities.

*“Und als dann 1998 in Deutschland die Liberalisierung des Energiemarktes umgesetzt worden ist, haben sich schon Kommunen überlegt: Wie können wir dort mit unseren Stadtwerken eigentlich weiter bestehen? Ist es nicht sinnvoller, in Kooperationen zu gehen oder sich eine private Minderheitsbeteiligung ins Boot zu holen, um zu sagen, man vernetzt sich höher auf einer anderen Ebene? Oder man holt sich das Know-how der Privaten rein. Und ein Teil der Privaten hat das getan, hat also Teile der Stadtwerke veräußert. Und wenn dann die Wasserversorgung dort mit aufgehängt war, wurde eben die Wasserversorgung teilweise auch mit-veräußert.” (PA1)*

As Pflug (2008: 269) noted, the largest private operators in the German water sector according to their number of shareholdings are E.ON, RWE and EnBW. This development on the energy market enhanced the competition pressures for the French companies but also enlarged the choice of potential partners for local decision-makers.



*“Quand dans une ville vous avez l'eau et électricité, l'activité électricité est toujours plus importante que l'activité eau en terme de chiffre d'affaire. Donc celui qui tire l'entreprise c'est plutôt celui qui fait l'activité électricité. Et donc les électriciens ont développé toute une série de participations dans des Stadtwerke pour avoir accès au marché de la distribution de l'électricité et donc de ce fait, étant des acteurs locaux, ils ont développé des activités dans l'eau.”<sup>26</sup> (PO4)*

In comparison to French operators, German energy suppliers have relied on a clear competitive advantage. This advantage has been based on three factors. First, with energy as a core business, these operators are more adapted to the formal structure of their client, the local utilities. Second, they can use their reputation with a great number of local decision-makers and therefore benefit from trust relationships with them. These relationships were usually built up through previous cooperations in the local urban services and through the distribution of energy as regional providers. They came into existence at a time when calls for tender were not compulsory and no competition mechanisms were at work. Third, the cooperation between German operators and municipalities was facilitated by a common understanding of the role each partner plays in the cooperation. Hence, German energy operators usually see a participation in the water sector more like a financial investment and are more likely to leave the municipality more scope of action concerning the local management of water, while French private operators seek to directly participate in the operative business.

*“Im Moment, wo wir Mehrheitseigentümer werden würden, müssten wir ein anderes Geschäft machen, müssten wir auch eine andere Struktur als Thüga<sup>27</sup> fahren. Nämlich als Mehrheitsgesellschafter muss ich durchregieren, muss ich praktisch auch aus der Kommunikationssicht meinen Kollegen vor Ort sagen, was sie zu tun und zu lassen haben und automatisch würde letztendlich eine Entfremdung kommen zwischen den Mitarbeitern vor Ort und den Mitarbeiter in München.” (PO3)*

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<sup>26</sup> When in a city you have water and electricity services within the same organization, the services of electricity are always more important than the water services in terms of turnover. Hence, the one who leads the company is the one who does the electricity services. And the electricians have increased their participation in the Stadtwerke in order to have access to the electricity distribution and therefore, becoming local actors, they have developed an activity in water services as well (Own translation).

<sup>27</sup> Thüga represents a peculiar case in the field of urban services. Active at the national level, Thüga defines itself as a platform or a network of independent municipal utilities, and supports their development without taking part in their operational management at the local level. Its strategy is based on the take-over of minor shareholdings in various municipal utilities, which allows local decision-makers to keep the control over the utilities (Own translation).

*“Simplement nous si on veut apporter notre savoir faire, il faut qu'on ait les moyens de l'apporter, ça veut dire, qu'il faut qu'on assure le management de l'entreprise. On n'a pas vocation nous à être des investisseurs financiers. Nous quand on investit quelque part, c'est pour gérer pour manager, pour apporter notre savoir faire.”<sup>28</sup> (PO4)*

This distinction in strategies, management logic and interests, between German private operators and private French multinationals has a great impact on cooperation with local stakeholders and makes a real difference in the construction of a PPP. The case of Potsdam is particularly interesting for any understanding of the ambiguous relationships between private operators and local stakeholders, since the municipality first established a partnership with a French private operator. After two years the municipal government broke it, and entered into a new partnership with a German energy operator (Paffhausen, 2008; 2010).

### **The municipal financial crisis**

Since the 1990s, German municipalities have had to face increasing budget deficits. According to some observers, this financial crisis is one of the main drivers of municipal ownership privatization (Bel et al., 2007). This crisis has various origins. First, it derived from the growing discrepancy between municipal expenses and revenues. The rise of public debt in Germany led to a reduction of the federal subsidies granted to municipalities. Second, municipalities had to take over increasing numbers of tasks from the states and the federation (cost shifting), especially in the social sector. Last, laws on tax reduction and a collapse of the local business taxes contributed to deteriorating municipal financial situations (Kluge and Scheele, 2003: 8). These financial problems strongly reduced the municipalities's scope of action and eroded the self-government principle (Bulkeley and Kern, 2006: 2241). Furthermore German states exerted pressures over city councils in order to make them reduce their deficits. In several extreme cases, the administrative authority (*Regierungspräsidium*) may decide to freeze the municipal budget and rely on a compulsory administration (*Verwaltungszwang*). In order to avoid this,

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<sup>28</sup> But if we want to bring our know-how, we need to have the means to bring it, which means, we have to obtain the management of the company. We do not aim at being financial investors. When we invest somewhere, we have to manage as well, in order to bring our know-how. (Own translation)

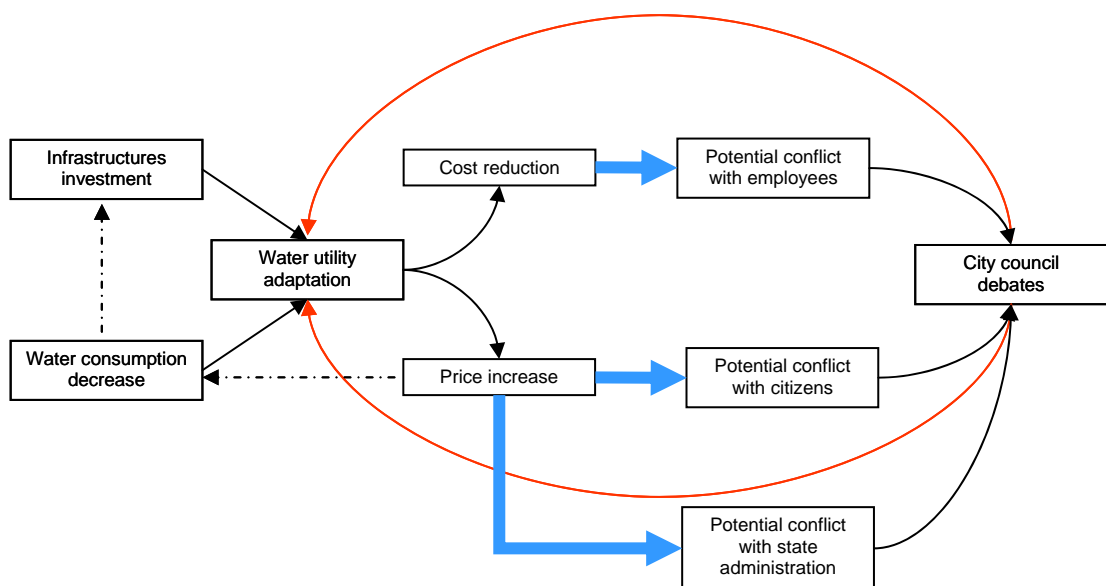
municipalities attempted to carry out “budget consolidation programs” in order to reduce the administrative costs (Wollmann, 2002: 39). These financial constraints might lead municipalities to explore the possibility of privatizing in order to obtain more financial scope of action and to cope with high investments in sectors such as water distribution, sewage, energy, and public transportation. This high need for investment in infrastructure replacement, coupled with municipalities’ lack of financial reserves, has usually represented a real challenge for local authorities and their utilities (Kluge and Scheele, 2003: 9).

*„Zur kontinuierlichen Sanierung und zum Erhalt des deutschen Wasser- und Abwassersystems schätzt die Bundesregierung den Finanzierungsbedarf in den nächsten 15 bis 20 Jahren auf 150 bis 250 Milliarden Euro (Heymann 2000: 12). (...) Diese Gelder werden vorwiegend in das bis zu 100 Jahre alte, sanierungsbedürftige Rohrleitungs- bzw. Kanalisationsnetz investiert werden müssen. Diese hohen Investitionssummen stellen die Kommunen in den kommenden Jahren vor enorme Herausforderungen.“ (Libbe et al., 2004: 12–13)*

In addition, German municipalities have had to face a demographic change, which has meant shrinking populations in several cities (Bullinger, 2002), as well as a general decrease in water consumption (*Branchenbild der Deutschen Wasserwirtschaft*, 2011: 39). These two factors (decrease in population and decrease in consumption) have in turn had a direct impact on water management. First, as the network system needs to be adapted to local demand, a change in local consumption may lead in some cases to an adaptation of the local infrastructure and therefore to new investments. Second, population decrease affects the water production and therefore the revenue of the utility. This situation may lead to a sunk cost spiral, where the diminution of the water demand associated with the investment needs in infrastructure causes a price increase, which may lead to a further diminution of water consumption (Kluge, 2005: 10–11; Libbe and Moss, 2007: 392). These problems were more acute in Eastern Germany, where investment needs and population decrease were much higher than in Western Germany.

In order to cope with this situation, utilities can rely on two strategies: either increase their water prices or reduce their production costs. Raising water prices remains a contentious strategy for several reasons. First, it may lead to a sunk cost trap through a decrease in water consumption. Second, price increases are a very sensitive issue at the local level and may lead to the emergence of citizens’ protests

and become a political issue for local decision-makers, who in turn may exert pressure on the utility to force it to decrease water prices. Third, water utilities are not allowed to freely increase prices as they see fit since they have to respect the regulation of the federated states. Thus, an excessive water price increase may also lead to conflicts with the state administrative authority in charge of the supervision of local authorities. Therefore, it leaves municipalities no real scope of action to cope with a change in their environment. Another strategy is to reduce the production costs. This change in the utility takes place through reorganization and staff-reduction. Reorganization aims to reduce the utility's hierarchy and the number of departments in order to obtain more flexible and thinner structures. In addition to reducing their number, any reorganization must grant departments more autonomy and responsibility and therefore transform them into cost or profit centers. For that purpose, utilities began to take part in benchmarking programs organized by professional associations. Staff reduction was done through outsourcing and employee reduction. However, these measures may also produce uncertainty among the utilities employees and in many situations these led to reactions from employees and the trade unions, which in turn have exerted pressures on the city council. The dilemma in which local water utilities may be trapped is summarized in the following chart.



**Figure 8: Sunk cost trap and potential conflicts among central stakeholders**

## **The stability of the German water sector despite pressures to change**

### *The reaction of domestic actors to reforming water services*

Despite these pressures to change, the German water sector has been characterized by a strong continuity for two reasons. The first is the institutional incompatibility between the domestic framework and the European regulations. The second reason is that domestic actors — that is, professional associations, politicians, and local decision-makers — defended their interests (Knill and Lehmkuhl, 2002). Hence, privatization trends were opposed by German professional associations (Association of German Mayors, Association of Municipal Utilities, and Federal Association for Energy and Water Economy), which were supported by the Social Democrats and the Green party. For them, introducing competition mechanisms and adopting obligatory calls for tender would infringe on various basic principles of the German model of water management. First, it would restrict the freedom of the municipality to organize the management of a resource such as water and therefore undermine the principle of self-government. Second, the principles of *Daseinsvorsorge* and public duty would be weakened since the local and public management is essential for the supply of high quality water and for the development of the regional economy (Coeurdray and Blanchet, 2010: 61–62). Finally, in line with the conclusions of the report published out by the Federal Administration for Environment (Brackermann et al., 2000), professional associations warned that a liberalization would not bring economic benefits and could even have negative consequences on the environment and on public health.

For a great number of domestic actors, the water sector represents a typical case of market failure. First, as an extreme form of natural monopoly, competition is not possible or less efficient than provision by a sole utility regulated by a public body and limited to a specific area. This form of imperfect competition is further justified by the high fixed costs and the material indivisibility of the infrastructure necessary to manage the resource. In addition, the limited demand for the resource in a specific area may lead to insufficient size and generate financial problems. This in turn legitimizes the use of instruments such as the creation of multi-product

monopolies supported by the state through cross-subsidies. Considered a source of competition distortion by opponents of integrated local monopolies, such practices are legitimized by proponents as essential in order to provide the local population with a high-quality service at an affordable price. Both of these criteria are used by proponents to legitimize the retention of a public management system and discredit private operators, who might neglect the high infrastructural investments necessary for this sector (Bakker, 2003: 41). Second, the high external effects of the water sector are another reason underlying the idea of market failure and justifying state intervention in order to internalize the cost of external effects (Freigang, 2009: 52–53). For these actors, a private operator who is mainly driven by profits would not be in a position to ensure the high hygiene standards necessary for water and to provide universal coverage independent of the financial situation of the population. Last, proponents often rely on the symbolic dimension of water as “a public good” or a good essential for life, which should not be managed by private actors. In extreme cases, several actors argue that the resource should be managed by the community, for instance through users associations, because of both “market” and “state” failure (Bakker, 2007: 441).

After many years of debates on water market deregulation, the German Federal Parliament, in line with the decision of the European Parliament, decided in 2002 to modernize water-sector management. This decision was the result of criticism made by members of the German Assembly of the German water sector in a motion from October 2001, called “Sustainable water management in Germany”. Criticisms were directed towards the fragmented character of its structure, the limited use of economies of scales, the absence of international commitment, the inefficiency concerning the optimal water supply, and the lack of competition (Deutsches Bundestag, 2001). Hence, while the German assembly rejected the adoption of a competitive model inspired by France or England, it accepted a modernization of the sector. In 2004, the German assembly defined various standards for modernizing the German water sector. In order to become more cost-efficient and competitive, German water utilities were encouraged to (Deutsches Bundestag, 2004: 2):

- Cooperate with other companies (public or private) in order to enhance economies of scale.
- Introduce a benchmarking process between local utilities in order to improve internal processes.
- Integrate wastewater treatment with water distribution through an equal tax treatment (this should reinforce economies of scope)
- Loosen regulations associated with the locality principle in order to let the utilities develop a business beyond their municipal border.
- Increase the development of the German water business at the international level.

For the Federal Assembly, which approved this strategy on March 15, 2006, the modernization was expected to result in the transformation of the public utilities into more cost-efficient, client-oriented and competitive operators. However, these debates worked on the assumption that the success of the change process in the water sector would result from the implementation of broad rules that could be applied generally without taking their consequences at the local level into account.

While these measures encouraged municipal utilities to adopt more competitive practices and to become more cost-efficient, they did not result in replacing the main organizational and institutional features of water services. In contrast, a striking continuity in the organization of the German water sector as a public and local sector can be observed by looking at its structure as well as the rules driving it. The small size and the municipal ownership of the water operators represent two main features of the German water sector that have remained unchanged (Wackerbauer, 2009a; Wackerbauer 2009b). These features are enforced by several institutional principles that have been guiding the behavior of German water operators. Hence, the fragmentation of the German water sector is confirmed by the principle of subsidiarity, which ensures that the management of the services remains under the control of the smallest governmental entity. The locality principle (*Örtlichkeitsprinzip*) also structures the fragmented German sector since it defines the economic activity of municipal enterprises and generally forbids municipal water utilities from exerting an economic activity beyond their municipal borders. The principle of *Daseinsvorsorge* strongly influences the activity of the municipal utilities as working for the well-being of the local population and therefore excludes

any profit-making behavior. This principle contributes also to the exclusion of private sector participation in water services.

In 2008, the German water sector remained highly fragmented, with 6,211 local water suppliers and 6,900 wastewater operators (ATT et al., 2008: 34). The next two tables show the evolution of the size of the water operators from 2001 until 2007 for water distribution and from 2003 to 2007 for wastewater treatment. In the first table, it can be noted that the German water sector is made up of small operators since more than 70% of German water operators have been distributing less than 0.5 million m<sup>3</sup> water a year. In addition to this first feature, it can be observed that this situation barely changed between the beginning and the end of the 2000s.

	<b>2001</b>	<b>2004</b>	<b>2007</b>
Below 0.1 million m <sup>3</sup> /year	35.4%	34.8%	34.8%
0.1 – 0.5 million m <sup>3</sup> /year	34.8%	35%	35.1%
0.5 – 1 million m <sup>3</sup> /year	12.4%	12.7%	12.6%
1 – 5 million m <sup>3</sup> /year	13.9%	14.1%	14%
5 – 10 million m <sup>3</sup> /year	2.0%	1.9%	1.9%
Above 10 million m <sup>3</sup> /year	1.5%	1.5%	1.6%

**Table 7 : Size structure of water supply utilities**  
(Source ATT et al., 2005; 2008; 2011)

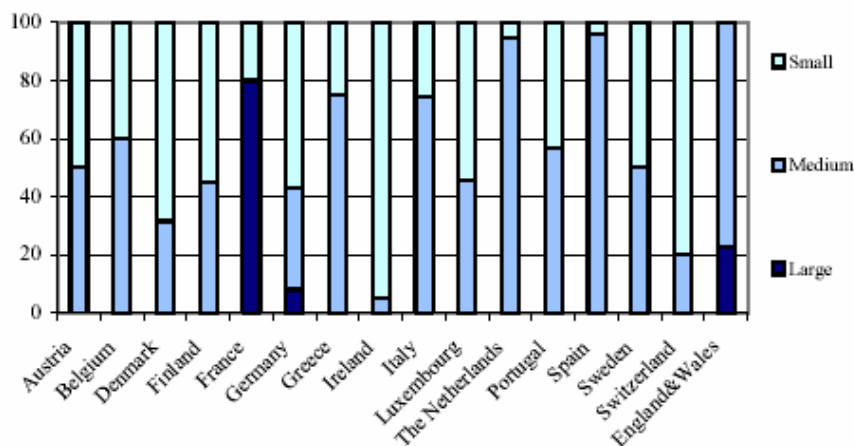
In the field of water sanitation, the data show an even stronger trend towards fragmentation. Hence, the wastewater sector was managed by an increasing number of small operators: the percent of operators taking care of water sanitation of less than 5,000 inhabitants grew from 13% in 2003 to 68% in 2007. In contrast to the situation for water distribution, the number of operators managing wastewater for a population of more than 10,000 inhabitants decreased significantly during the same period.



	2003	2006	2007
Below 5,000 inhabitants	15%	55.7%	68%
5,000 – 10,000 inhabitants	18 %	12.6 %	9 %
10,000 – 100,000 inhabitants	59 %	28 %	20 %
More that 100,000 inhabitants	8%	3.7 %	3%

**Table 8 : Size structure of wastewater plant operators**  
(Source ATT et al., 2005; 2008; 2011)

Egerer and Wackerbauer provided an interesting comparison of the size structure of the water supply operators across different European countries. This comparison reveals that after Ireland, Switzerland, and Denmark, Germany is the country with the greatest number of small operators (below 100,000 inhabitants) among the countries represented in the following figure. It is also interesting to observe that although the structure of the German water sector is largely fragmented, Germany is one of the three countries with large water suppliers (beside France and Great Britain).



**Figure 9: Comparison of the size structure of water operators in 2003** (Source: Egerer and Wackerbauer, 2006: 47)

The next two tables point out that German operators have largely remained in the hands of the municipality over the last decade. Even in the context of the municipal financial crisis, the central role of German local government “has been confirmed and even strengthened” (Wollmann, 2004: 654). The main changes in the organizational structure of the water operators occurred at the level of the legal form. Since the 1990s, water operators have increasingly taken the form of public

companies under private law — more independent of the local administration and the political body — while the number of municipal utilities (politically controlled by the municipality) decreased continually from more than 70% in the 1970s (Musiolik, 2007: 77) to less than 30% in the end of the 1990s. This trend, although not as strong as during the 1990s, continued during the 2000s. In parallel, the participation of private companies in the capital of public utilities — that is, mixed companies — also increased during this period and almost reached 30% in 2003. The category “other private law companies” is mainly made up of private water cooperatives and user associations. Thus, a tendency toward more corporatization<sup>29</sup> of municipal utilities can be observed, although the ownership remains primarily in public hands (Wackerbauer, 2009: 136). This trend of keeping ownership in public hands has even been reinforced by the recent remunicipalization of local water services as well as the emergence of citizens’ initiatives that have attempted to impede private sector participation in the water sector, such as in Berlin, Hamburg, Stuttgart, to name but a few.

	<b>1997</b>	<b>2002</b>	<b>2003</b>	<b>2005</b>	<b>2008</b>
Mixed public-private companies AG/GmbH	20%	28%	29%	25%	26%
Other private law companies	4%	2%	3.5%	6%	16%
Municipal companies AG/GmbH	28%	31%	31%	33%	29%
Special-purpose associations	19%	17%	16%	15%	17%
Water and soil associations	6%	6%	6%	16%	8%
Municipal utilities (Eigenbetriebe)	23%	13%	15%	4%	3%
State run utilities (Regiebetriebe)	1%	3%	0.5%	1%	1%

**Table 9 : Forms of business organization among German water suppliers (Shares in percent related to water output). Source: Wackerbauer, 2009: 136; BDEW, 2011: 35.**

In the wastewater sector, the organizational form of the operators is slightly different than in the water supply sector. Both the ownership and the legal forms have largely remained public. However, municipalities increasingly transformed

<sup>29</sup> I use the term "corporatization" to define a change in the legal framework of the utility from public to private. However, the utility remains in the hands of the municipality. In German the term "formal privatization" is used to define this change, even though no real privatization takes place.

their utilities — which were state run during the middle of the 1990s — into municipal utilities, that is, independent bodies still strictly controlled by the local administration and local politicians. The creation of water associations also gained in popularity over the last decade. In this case, municipalities decide to cooperate with other municipalities within an association in order to manage the wastewater. Finally, in the “others” row we find the private organizational forms of wastewater management or the organizations involving private operators. In 1997, only 2.5% of the “other” category involved the participation of a private operator in wastewater services (Wackerbauer, 2009: 136–137).

	<b>1997</b>	<b>2002</b>	<b>2003</b>	<b>2005</b>	<b>2008</b>
State run utilities	44%	23%	20%	15%	12%
Municipal utilities	30%	43%	43%	36%	37%
Institution under public law (AöR)	14%	16%	17%	17%	13%
Special purpose and water associations	4%	13%	12.5%	28%	28%
Other	8%	5%	7.5%	4%	10%

**Table 10 : Organizational form of the wastewater disposal (Data in percent, weighted according to the population connected to the sewerage system). Source: Wackerbauer, 2009: 137; BDEW, 2011: 35.**

The German water sector is still dominated by operators owned by municipalities. As the next figure shows, water is generally managed by public bodies all over Europe. While several countries have not experienced private sector participation in water services (Netherlands, Luxemburg, Switzerland) and other countries are mainly managed by private operators (England and Wales or France), Germany belongs to a group of countries (with Austria, Finland, Portugal or Sweden) that has experienced several cases of privatization but has widely remained dominated by water operators in public ownership. Despite the factors that may have weakened the role of municipalities’ water service provision, the structure of the German water services has thus remained stable in its main features.

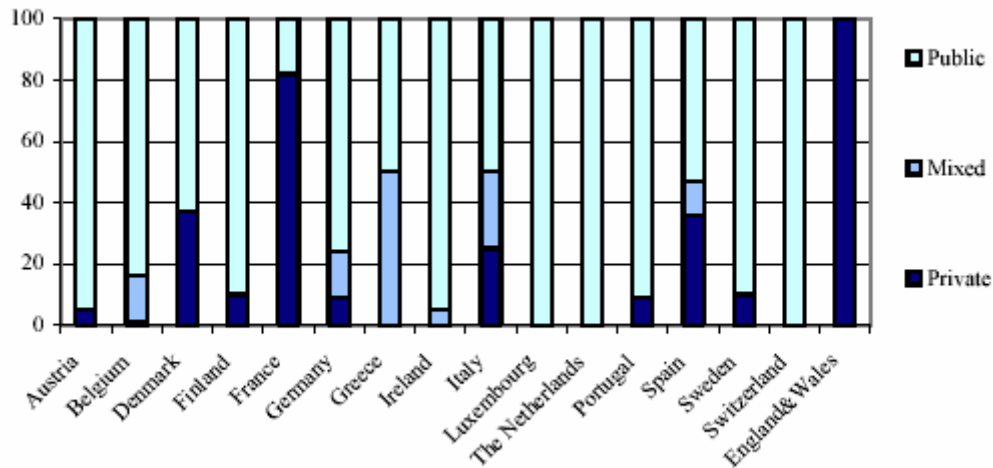


Figure 10 : Comparison of the type of water operators in 2003 (Source: Egerer and Wackerbauer, 2006: 47)

*Limited organizational changes at the local level*

At the local level, municipal water utilities undertook several changes in their practices in order to better cope with their environment but have generally retained control over their water services and have avoided resorting to a privatization. Hence, despite the adoption of new management practices, they rejected a model based on competition and the introduction of a private partner within the system.

In addition to the two strategies described previously, municipal utilities can also become more competitive and client-oriented by attempting to reinforce the commercialization of their activity (Naumann and Wissen, 2008). In order to obtain more scope of action, a great number of municipal utilities have carried out a corporatization. Through that change, utility boards of directors do not need the approbation of the local decision-makers for every decision they have to take. In addition, corporatized organizations also obtain more independence from the state legal framework, because they do not have to respect the law on municipally owned companies (*Eigenbetriebverordnung*). As depicted above, a widespread corporatization of publicly municipally owned enterprises (*Eigenbetrieb*) occurred during the 1990s. Furthermore, utilities can rely on endogenous solutions commonly used in Germany in order to adapt to their environment. First, they can pursue the integration of various services into one enterprise in order to create economies of scope and to profit from the cross-subsidies. Hence, in unstable environments, local decision-makers generally tend to increase the integration of local public services

into one enterprise. In several cases, local decision-makers have even decided to proceed to a fully integrated supply and wastewater disposal concept (Ambrosius, 1995: 47). For that purpose, they have integrated tasks, which are usually managed within a municipal department, such as water sanitation. For instance, the wastewater treatment task of the municipality of Essen was taken over by the utility in 1998. Another strategy of the utilities is to expand their activities in new economical sectors or at the international level. Through the autonomy gained from corporatization, municipal utilities started to develop their activity in other sectors, such as telecommunication or data management, and expand their activity beyond the local frontiers in cases in which the state regulation allowed it. Through the development of successful businesses, utilities have thus been able to generate new revenues for the municipalities, which were also expected to improve local public service delivery. This strategic turn may also be the only chance for the communal utility to survive in an increasingly competitive environment (Tomerius, 2004: 9). This commitment started in a rather uncoordinated fashion in the 1990s and was a local reaction to particular problems. Step by step, however, a clear strategy that dealt with the extension of the municipal field of action in various economic areas has unfolded (Mayer, 1994: 440–441). Two significant examples of utilities' internationalization strategies are Berlin, with its subsidiaries Berlin Water International (BWI), and Mannheim with its utilities (MVV). Investments in competitive businesses were noticed in the telecommunication sector (Berlin), the data management sector (Leipzig), offshore wind energy sector (Munich), or in the take-over of other utilities (Hamburg, MVV, and Frankfurt). This situation recently led to heated debates on the function of the municipal economy. However, the competitive behavior of municipal enterprises had already represented a problem in the beginning of the 19<sup>th</sup> century and led to the creation of a legal framework that restricted utilities economic scope of action.

Consequently, instead of opening the system to private operators, local decision-makers generally choose to adapt the system through endogenous changes that are in line with the intrinsic principles of the German water sector. Despite the presence of alternative models of water management supported by private operators, opening the services to exogenous actors has remained an exception, as interviewees from private companies have pointed out. Thus, local decision-makers are aware of

alternative courses of action but do not want to recognize the potential necessity to rely on them in order to cope with their problem (Koch, 2008: 57).

*“Ce n’est pas un marché très dynamique l’Allemagne aujourd’hui (...). Le marché est complètement dominé par les Stadtwerke. Il y a peu d’appels d’offre en Allemagne. En France, il y a environ 800 appels d’offre par an, en Allemagne il y en a 10 à tout cassé. Donc il n’y a pas non plus d’obligation de renouveler les contrats. C’est plutôt des petits contrats de prestations de services.”<sup>30</sup> (PO4)*

Summary: In these two chapters, the water sector was analyzed as a field driven by path-dependent dynamics. First, the creation of a strong public and local model of water services was studied. This analysis pointed out the effect of several positive-feedback mechanisms (coordination, complementarities and investment spirals) leading to a situation of lock-in among the actors of the field. These mechanisms contributed to preventing the adoption of alternative courses of action, i.e. privatization. Second, the stability of this sector was studied in a new environment, namely the post-Reunification context. During this period, the German water sector was challenged by competitive, financial and regulatory pressures to change its organization and its mode of governance. However, it was shown that despite these pressures, the German water sector has remained highly stable in its intrinsic principles and that, despite several local changes in management practices, the German water sector has remained public and local, confirming therefore the assumption of a path-dependent process.

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<sup>30</sup> Today, Germany is not a very dynamic market. The market is completely dominated by Stadtwerke. There are few calls for tender in Germany. In France, there are around 800 calls for tender yearly; in Germany there are maybe 10. There is no obligation to renew the contracts. There are rather small contracts for the provision of services (Own translation).

## **Chapter 6: Path development in three German municipalities**

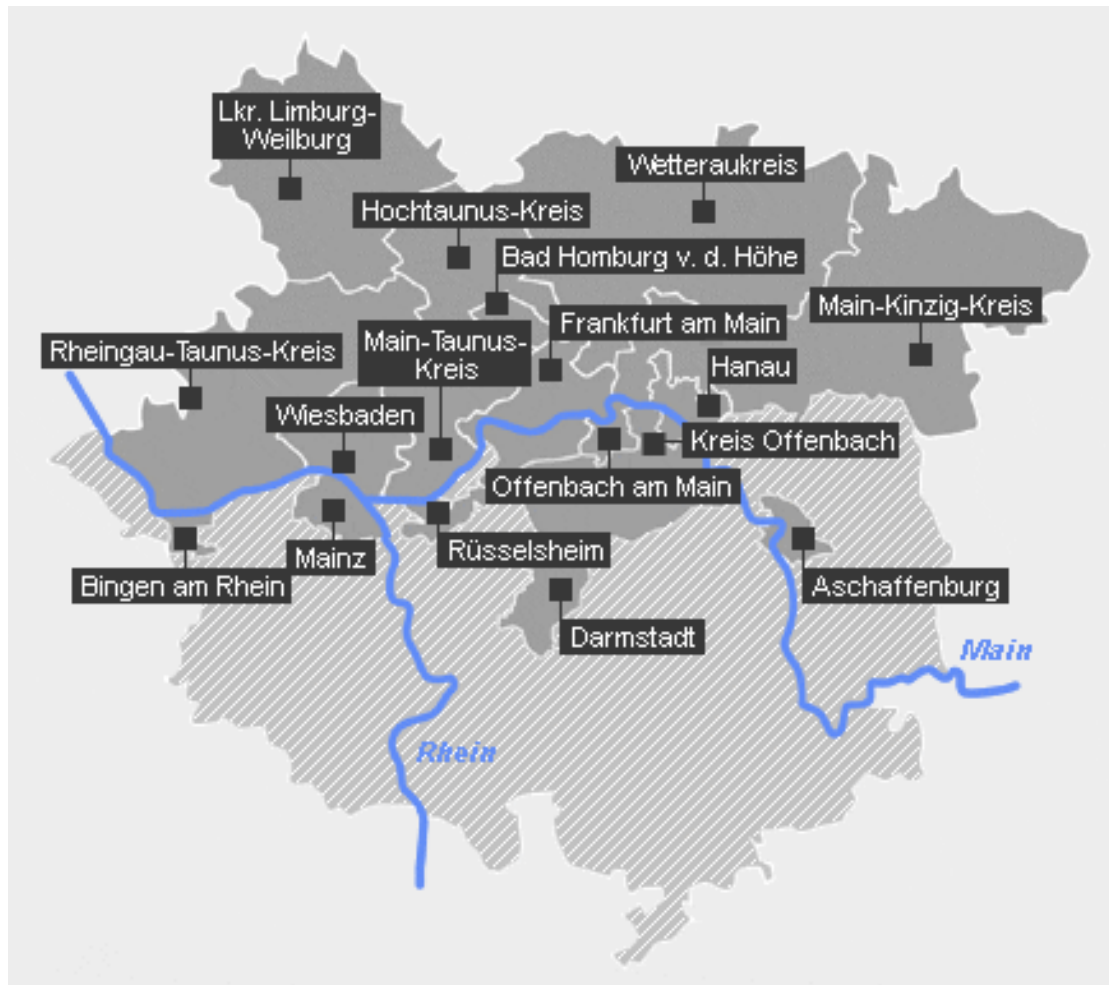
The aim of this chapter is to examine through a clinical analysis the variety of organizational developments of water services across local settings. In this chapter, I describe three local policy processes that have unfolded since the 1990s. Relying on the previous description of the dynamics of stability and change that have affected the German water sector, this case study description concentrates on various dimensions discussed in the theory section. Each case study starts with a brief introduction of the case — the municipal context and the organizational development — and of the outcomes of interest — that is, the description of the reforms that occurred in each case. This brief case description is followed by an analysis of various mechanisms structuring actors' interdependences, the strategies of actors in trying to maintain or bring about change in the organization of water services, and eventually on the consequences produced by the various attempts to change local water services.

### **Frankfurt water services as a case of path inflection**

*Introduction: overview of the municipality and its water utility*

City profile: Located in the state of Hesse in western Germany, with over 660,000 inhabitants, Frankfurt is the fifth largest German city, at the center of the second largest metropolitan region of Germany, the Frankfurt Rhine/Main region (See Figure 11). This region has a population of 5.5 million. Due to its strategic location, Frankfurt is one of the most important transportation centers in Europe. The development of various transportation infrastructures has been an important source of support for the industrial development of the city and its region. This city is also one of the economically wealthier places and one of the most powerful financial

locations in Europe. Indeed, Frankfurt is one of the five most important stockexchanges worldwide and had the headquarters of approximately 230 banks on its territory in 2007. The city is also the head office the European Central Bank. The large number of companies established in Frankfurt in combination with the high rate of the local trade taxes (*Gewerbesteuer*) represents the main financial revenue for the municipality.



**Figure 11: Frankfurt Rhine/Main Region (Source: Region Frankfurt Rhein/Main<sup>31</sup>)**

During the 1990s, the political makeup of the city council was relatively stable. Three parties dominated the city council: the Christian Democrats (henceforth CDU), the Social Democrats (henceforth SPD) and the Greens (*Die Grünen*). The results of the municipal election of 1993 were as follows: the CDU obtained 33% of

<sup>31</sup> <http://www.frankfurt-rhein-main.de/cms/tourismussuite/res/img/frm-karte.gif> (accessed 20.03.2011)



the votes, the SPD 32%, the Greens 14% and the Free Democratic Party (henceforth FDP) 4.8%. The remaining 16.2% of the votes were attributed to other small political parties. The election of 1997 produced similar results as far as the three major parties were concerned: the CDU received 36.3% of the votes, while the SPD obtained 29.2% and the Greens 16.9%. With 6.2% and 5.6% respectively, the Republicans (REP, a national conservative party) and the FDP succeeded in entering Frankfurt's city council. The transformation of Frankfurt's urban services started during the administration of the SPD mayor Andreas von Schoeller, between 1991 and 1995. Following a clash within the ruling political coalition between the SPD and the Greens, a new mayoral election took place in 1995. The CDU candidate and current mayor, Petra Roth, won the elections and continued the reforms started by her predecessor.

Municipal utility development: Historically, the organization of the water sector in Frankfurt is a representative example of the general evolution of German urban services. Water distribution has been integrated with electricity provision in the same utility since the 19<sup>th</sup> century. Due to the competition between gas and electricity as sources of energy, both sectors continued to be managed independently of each other until 1998. The water-electricity utility and the gas utility were kept under the control of the city council as part of the municipal administration. In the beginning of the 20th century, the municipal department in charge of urban services was transformed into a municipally owned utility (Lutz, 2000). During the 1950s, public transportation was also integrated to the organization (FC1). In the beginning of the 1990s, urban services in Frankfurt were therefore managed by a municipal and integrated utility, called *Stadtwerke Frankfurt/Main*. As a municipally owned utility, SWF was transformed into a GmbH in 1995. Until 1998, another utility, called Maingas, managed the gas services. This utility was created in 1909 as a joint-stock company through the merger of two Frankfurt gas utilities, and was called *Frankfurter Gasgesellschaft AG*. In 1930, it took the name of *Main Gaswerke AG*. Two years before, in 1928, Thüga, as a minority shareholder, had become partner of the Frankfurt municipality for the gas sector through its subsidiary *Hessen-Nassauische Gas AG*. As most German municipal utilities, Frankfurt's urban services are integrated within the same organization. In such organizations, water services, in

comparison to energy services, represent only a small part of the whole business, as is indicated in the following table.

Sales revenues (in Mio. €)	
Gas	388,9
Electricity	385,8
Water	115,1
Heating	71,4

**Table 11 : Sales revenues from Mainova in 1998**  
(Source: Lutz, 2000, p. 472)

While SWF was responsible for delivering water to the population, the sanitation services, like in most German municipalities, had remained a municipal department (*Regiebetrieb*) and became a municipally owned utility in 1999. Following the Hesse Municipally-owned utilities Act and the Municipal Order, the utility is also — as an organization with a public legal status — exempted from paying taxes.

Reunification did not affect the local water utility at all. As an integrated utility, SWF's water business was somewhat influenced by energy deregulation even if it did not directly lead to a reform of urban services. By contrast it was largely responsible for the creation of Hessenwasser in 2001, and also contributed to the organizational change linked to the legal unbundling in 2005 (Schelle, 2006: 169). In addition, the influence of the New Steering Model and the budgetary pressures had a large impact on the decision-making process. Indeed, in this time, the political debates were more oriented toward the necessity to make the municipal utility more efficient by bringing private management know-how to bear on it. While Frankfurt is one of the wealthier cities in Germany, and thus did not face the same financial problems as other cities, the municipal deficit was also one of the reasons for implementing changes. Thus, SWF conducted a corporatization in 1995 (transformation into a *GmbH*), followed by a merger with Maingas AG in 1998. This merger between both utilities is interesting for two reasons. First, Thüga, the long time partner of Maingas, became SWF's shareholder and consequently got a foothold in the local water business. To put it another way, the merger led to the participation of a private operator (Preussenelektra AG (Henceforth PREAG) through its

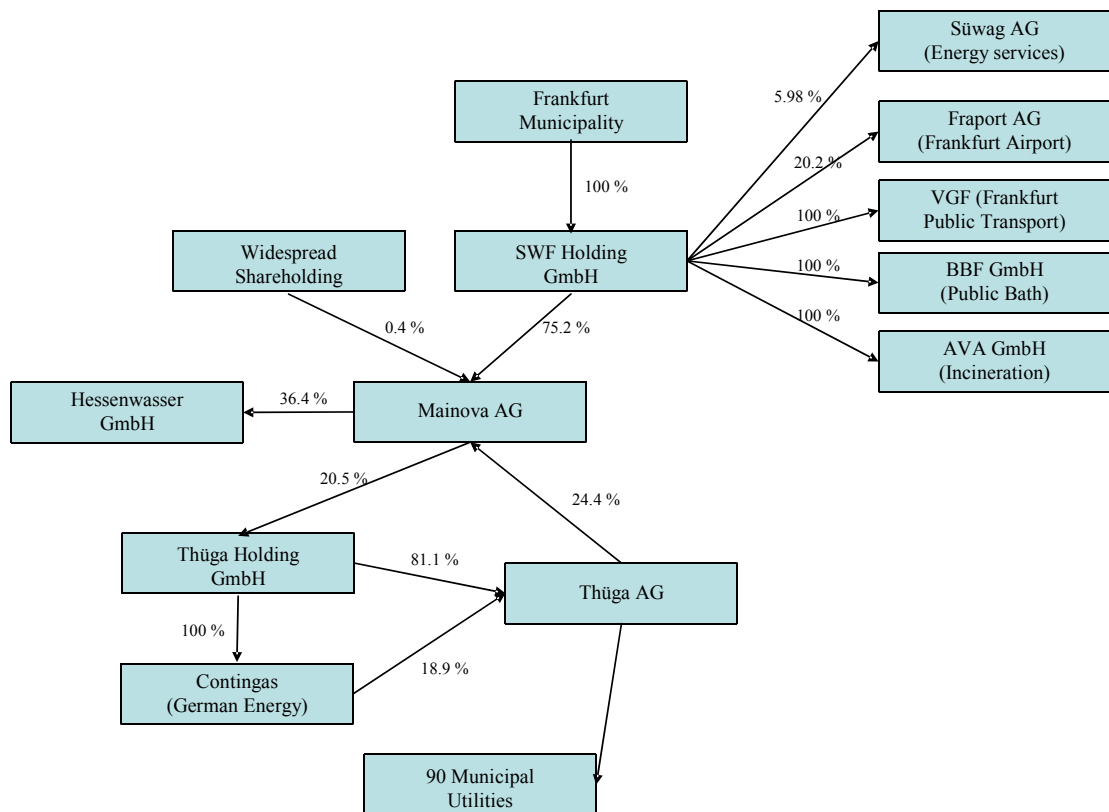
subsidiary Thüga) in the water business. The second interesting point is how this private participation came about. Even though the municipality entered into a partnership with a private partner, this cooperation was not the product of an international call for tenders. Following the merger between Maingas and SWF, two further changes occur in the organization of Frankfurt's municipal services. First, a regional reorganization of the water sector occurred in 2001 through the creation of Hessenwasser GmbH. Secondly, several municipal utilities including Mainova took over Thüga AG in 2008. Figure 12 provides an overview of the organizational structure of Mainova. Today, the utility delivers water to more than 700,000 residents in Frankfurt and its region through 1,860 km canalization. Table 12 summarizes the various steps of the organizational development of Frankfurt's water services since 1990.

Dates	Organizational development
1995	Transformation of SWF, a municipally owned utility, into a limited liability company and outsourcing of VGF into the SWF Holding
1998	Merger of Maingas AG with SWF into Mainova AG as a joint-stock company
1999	Transformation of Frankfurt's sanitation services, a municipal department, into a municipally owned utility
2001	Creation of Hessenwasser GmbH as regional water supplier together with Mainz, Darmstadt, and 15 further municipalities of the State of Hesse
2009	Takeover of Thüga by a consortium made up of 49 municipal utilities and whose main shareholders are Frankfurt's, Nuremberg's and Hannover's utilities

**Table 12: The organizational development of Frankfurt's water services**

Outcomes of interest: Studying Mainova AG is interesting for several reasons. Firstly, the case of Frankfurt shows the development of a utility that has not been subject to important crises, or been in need of considerable infrastructure investment. Second, changes in several organizational practices were necessary in order to make the utility more cost-effective but no real rupture with the German model of urban services took place. However, and this is the third point, a cooperation with a private partner came about. This cooperation occurred without an international call for tenders and the local government kept its control over the municipal services despite this partner. The case of Frankfurt represents therefore a suitable scenario of path inflection:

- Generally, the organization of water services was not called into question; exogenous management models, such as joint ventures or flotation, were suggested but not implemented.
- Actors dealing with the organizational changes were mainly established actors and no external actors intervened to bring a solution.
- While these changes were considered necessary in order to improve the performance of the organization within the established governance model, this model has not been replaced by a new one. The private actors had to adapt the governance model imposed by the local government.



**Figure 12: The organizational structure of Mainova (own representation)**

*Path-dependent mechanisms: toward a stronger integration of urban services*

In the period under investigation, Frankfurt's water distribution was already integrated with electricity and public transportation into one utility and could therefore profit from organizational synergies and cross-subsidies. In addition, the interdependence between the utility and the local government was regulated by the

state. Despite no need to commit important investments in infrastructure, the development of urban services was influenced by the financial context of the municipality, the performance of the utility, the diffusion of the New Public Management program and by the debates on the liberalization of European public services, especially in the energy sector.

Coordination between the central actors: In the beginning of the 1990s, the coordination between the local government and the utility was strongly influenced by the state regulation of Hesse. Until 1995, SWF had taken the legal form of a municipally owned enterprise and was therefore largely dependent on various state rules. The Municipal Utility Act (*Eigenbetriebverordnung*), the Water Act, and the Municipal Act of Hesse especially restricted its leeway. For instance, during the first half of the 1990s, the Water Act (Article 54.1.2) forced all municipalities with more than 100,000 inhabitants to manage the water distribution under the form of a municipally-owned enterprise<sup>32</sup>. The rationale behind this law was that water might only be managed by a private organization if it is proved that it is more efficient than the publically run alternative. Paragraph 39 of the same act regulated how and to what extent the water services in Hesse would be privatized. This regulation of the utility reduced its scope of action through a high coordination with the state of Hesse and impeded its transformation into a more politically independent enterprise. Moreover, this legal form enabled the local government to exert a strong control over the utility. SWF, as part of the municipal administration, had to have each one of its decisions approved by a political commission at the local level. This constraining legal framework confirmed the belief that the utility was at the service of the local community and that it should aim to deliver the resource under the best conditions and ensure that the local government respects the principle of *Daseinsvorsorge* and its public duty. Generally, the utility had to enforce legislation and standards stipulated by the political actors in order to meet the needs of the society as a whole.

Under this legal form, SWF was perceived by a great number of local decision-makers as lacking economic scope of action. A corporatization in 1995 gave SWF more independence from state regulation and local political interests. The purpose of this change was to give the utility more leeway and to enable it to carry

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<sup>32</sup> ZfK , Eigenbetrieb zur Kostendeckung, July 1993, p.11

out reforms to become more cost effective. As the former Frankfurt mayor put it, the aim was to reduce the coordination both inside (through a reduction of the hierarchy and a simplification of the decision-making process in the organization) and outside (through greater independence from state regulation) the utility.

*"Es geht auch darum, daß für die Mitarbeiterinnen und Mitarbeiter durch eine Verkürzung der Entscheidungswege, durch weniger Hierarchie, durch mehr Bündelung von Entscheidungs- und Durchführungsverantwortung, durch ein Unternehmen, das sich zu einem Dienstleistungsunternehmen mit kurzen Wegen entwickelt, eine höhere Motivation und eine größere Arbeitsfreude erreichbar ist, als das in einem Eigenbetrieb mit seinen notwendigerweise starren Strukturen möglich ist, der in den Klammern und Fesseln des Eigenbetriebsgesetzes arbeiten muß. "(Von Schoeler, former SPD mayor, parliamentary document, city council plenary session, 16.06.1994)*

The transformation was also aimed to prepare the utility for future changes in the European energy market. In order to cope with Brussels' future deregulation and to develop a competitive utility that would be capable of surviving in a liberalized market, the utility's emancipation from state regulation was crucial. As claimed by the former mayor during a speech at the city council in 1994, the goal of the utility's corporatization was not only to reduce the financial debt of the City of Frankfurt but also to prepare for the future liberalization of the energy market, which may undermine the institutional foundation of the *Stadtwerk* model.

*„Die Umgründung der Stadtwerke ist nicht nur notwendig, um zusätzliche Belastungen der Haushalte der nächsten Jahre zu vermeiden, sondern sie ist auch notwendig, um die Stadtwerke zu einem modernen Dienstleistungsunternehmen weiterzuentwickeln, das sich auf einem veränderten Markt behaupten kann, denn dieser Markt wird sich verändern. Wie schnell und in welchen Schritten diese Veränderung auch vor sich geht, man muß davon ausgehen, daß sowohl im Strombereich als auch im gesamten Energiebereich die europäischen Schritte zur Deregulierung und zu mehr Wettbewerb auch den Markt der Stadtwerke in Frankfurt am Main bestimmen werden. Da ist noch vieles im Unklaren, beispielsweise, wann und wie sich das auf der europäischen Ebene und in Bonn realisieren läßt. Daß die Reise in diese Richtung gehen wird, ist jedoch in alle Überlegungen zur Zukunft der Stadtwerke einzubeziehen. Deswegen müssen sich die Stadtwerke nicht nur wegen der Notwendigkeit der Haushaltskonsolidierung und der Kostenreduzierung, sondern auch, um sich an veränderte Marktbedingungen anzupassen, zu einem modernen Dienstleistungsunternehmen*

*im Energiebereich und im Nahverkehrsbereich entwickeln.” (Von Schoeler, former SPD mayor, parliamentary document, city council plenary session, 16.06.1994)*

Local decision-makers mainly agreed on the idea that the utility had to work as a modern enterprise which means being client-oriented, cost-saving, with competitive prices and a strong environmental policy. However, they also shared the belief that the intrinsic principles that define the goals and guide the functioning of the municipal utility had to be preserved. The following quotation from the former treasurer demonstrates the need to reform the organization in order to preserve the stability of the services.

*“Ich kann mir im Übrigen nicht vorstellen, daß sich die Stadt aus zentralen Bereichen der Daseinsvorsorge ganz verabschiedet und damit die kommunale Selbstverwaltung, die ohnehin schon in ihrer Substanz gefährdet ist, sozusagen noch von innen heraus aushöhlt. Trotzdem, auch und gerade in den Bereichen der Daseinsvorsorge sind neue organisatorische und wirtschaftliche Wege zu beschreiten. Es wird auch geprüft werden müssen - neben dem, was bereits in der Prüfung ist, ob die Stadtwerke in rechtlich selbständige Unternehmen aufgegliedert und in einen Unternehmensverbund mit der Maingas AG und anderen in der kommunalen Versorgungswirtschaft erfahrenen Partnern einbezogen werden sollten.” (Grüber, former SPD Treasurer, parliamentary document, city council plenary session, 24.06.1994)*

This reform, however, was largely contested within the city council. While the CDU agreed on a utility transformation, it criticized the fact that the *Daseinsvorsorge* was neglected, and the fulfillment of this goal would not be compatible with the new strategic orientation of the utility — namely economic efficiency. According to this party, respecting both goals would be unrealistic.

*“So wird der ureigenste Zweck eines Versorgungsunternehmens, nämlich Bevölkerung und Wirtschaft jederzeit ausreichend, sicher und preiswürdig mit Energie und Wasser zu versorgen, nicht erwähnt (...). Die Unternehmensziele sind teils widersprüchlich, teils nicht erkennbar. (...). Das Unternehmen soll durch eine Vielzahl von Maßnahmen die Einsparung von Energie und Wasser aktiv fördern, gleichzeitig optimale Leistungen für seine Kunden erbringen und beide Aufgaben zu den geringsten Kosten unter dem Gebot einer wirtschaftlichen Betriebsführung erfüllen. Das ist schlechterdings unmöglich. Energie- und Wassereinsparung wie konsequente Umweltschonung kosten nun einmal Geld, entweder das des Unternehmens oder das seiner Kunden. Für optimale, also*

*bestmögliche Dienstleistung gilt das gleiche. Beide Forderungen sind unvereinbar mit der gleichzeitigen Vorgabe, Ressourceneinsatz und Kosten zu minimieren."*  
(CDU political demand, parliamentary document, 07.06.1995)

In 1998, the transformation of the utility into a joint-stock company and its merger with the gas utility gave the board of management more independence from the municipality than under a limited liability law. However, the utility was still under the regulation of the State of Hesse. For instance, the take-over of Thüga in 2009 was conducted with financial goals in mind, but at the same time, this strategy had to respect the principle of locality enforced by the Municipality Act of Hesse. Another example shows the influence of the State regulation of the utility. In 2003, for instance, the abolition of the Hesse tax on ground water led to a reduction of the water prices by 13 cents/m<sup>3</sup><sup>33</sup>.

Organizational and institutional complementarities: Up until 1998, the integration of the electricity, water and public transportation sectors influenced the SWF's functioning. This integration was mainly used to finance public transportation through the electricity and the water sectors, while securing fair public transportation prices for Frankfurt's citizens<sup>34</sup>. In addition to synergies between the services, the utility could rely on cross subsidies, which in turn support the logic of local and public integrated monopolies.

The integrated form and the resulting cross-subsidies played a central role during the debates on the utility's transformation. In a general context of municipal financial crisis, the functioning of the utility was widely put into perspective. Even balanced with the profits of the water and electricity businesses, public transportation strongly contributed to the utility's deficit<sup>35</sup>. Confronted with this issue and despite the process of corporatization, which aimed to reduce the cost of the utility, the decision-makers debated on a solution to cope with the SWF's deficit. After long-running debates, the Stadtwerk model in Frankfurt was reinforced through the integration of the gas business in 1998.

*"Die Maingas und die Versorgungssparten der Stadtwerke (Strom, Fernwärme, Wasser) sollen fusioniert werden zu einem Querverbundunternehmen. Dies ist dringend erforderlich zur Steigerung der Ertragskraft (Synergieeffekte) und für*

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<sup>33</sup> Mainova, annual report, 2003, p.55

<sup>34</sup> ZfK, Stadtwerke heiraten Maingas, April 1998, p.5

<sup>35</sup> FR, Der Schuldenberg der Stadtwerke türmt sich weiter auf, 16.07.1996, p. 17



*einen ökonomisch wie ökologisch bedeutsamen reibungsfreien Ausbau der Fern- und Nahwärmeversorgung in Kraft-Wärme-Kopplung (...). Es ist sicherzustellen, daß die der Stadt zustehenden Gewinne des Querverbunds steuerfrei mit den Verlusten der Nahverkehrssparte verrechnet werden und daß die Neuordnung nicht zu Verschlechterungen hinsichtlich Umfang, Qualität und Preis des öffentlichen Nahverkehrs führt.” (SPD political demand, parliamentary document, 28.11.1996)*

As stated in the quotation above, the integration was expected to consolidate the utility and support public transportation as well as contribute to covering the municipal deficit. First, through the creation of various synergies, the integration was expected to save €10.2 million during the first years<sup>36</sup>. The reduction of employee numbers would lead to further cost reductions. Last, reinforcing the cross-subsidies would enable the utility to save €6.64 million through the profits earned by the gas business<sup>37</sup>.

*“Die Werke werden seit Jahren unter dem Dach der öffentlich-rechtlichen Betriebe als kommunales Querverbundunternehmen geführt. Wir sind nach wie vor der Auffassung, daß es für uns gar keine anderen Möglichkeiten gibt, als den steuerlichen Querverbund aufrechtzuerhalten.” (Pusch (SPD), parliamentary document, city council plenary session, 8.06.1995)*

The necessity to maintain the integration of the utility and preserve cross-subsidies was widely shared by local decision-makers. For the great majority of them, there were no other alternatives and it was therefore a necessity to keep this solution. Through the reinforcement of the organizational complementarities, local decision-makers also confirmed the positive effects of the institutional frameworks that support local public enterprises. Moreover, this integration was expected to prepare the utility for the future liberalization of the energy sector by creating a strong and competitive multi-utility enterprise<sup>38</sup>. Although the integrated model of the Frankfurt utility, with its cross-subsidies, was criticized by the camp of the Free Voters (Freie Wähler im Römer) and the FDP, integration of further municipal services has been acknowledged by the great majority of actors in Frankfurt and reinforced over time.

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<sup>36</sup> FR (Bartsch, M.), Strom, Wärme, Gas und Wasser aus einer Hand, 28.03.1998, p.19

<sup>37</sup> FR, Versorgungsriese mit Arbeitsplatzgarantie, 11.07.1998, p.21

<sup>38</sup> *Ibid.*

Investment in infrastructure: Local decision-makers did not have to make large investment in order to replace the infrastructure, as was the case in East Germany. However, during the first half of the 1990s, the utility's bad performance and the need to finance public transportation greatly affected the ongoing investments. For instance, in 1992 the utility had a deficit of €89.3 million, which in turn had an influence on future investments<sup>39</sup>. In 1996, SWF's yearly investment in infrastructure of around €66.5 million represented an important problem because of the utility deficit<sup>40</sup>. The corporatization of the utility and the creation of the holding company were thus expected to cope with the problem of financing though the expansion of the utility's activity in competitive businesses<sup>41</sup>. As a result of this change, the utility was expected to provide positive results by 1998.

*“Das Ziel für das Unternehmen Stadtwerke muß sein, mit seinen Leistungen am Markt die nötigen Erträge und Mittel zu erwirtschaften, um mindestens alle Kosten zu decken und um eine eigenständige Finanzierung von Zukunftsinvestitionen zu ermöglichen.” (CDU political demand, parliamentary document, 07.06.1995)*

The purpose of investing in infrastructure was the expansion and maintenance of the distribution assets in energy and water. In 2005 for instance, the investment in water distribution assets represented €4 million. No important investment therefore had to be undertaken in the construction of a water plant or in the expansion of the network. Last, annual reports indicate that the financing of investments can be covered through the cash flow from operating activities.

*“Der Mittelzufluss aus laufender Geschäftstätigkeit (328,7 Mio. DM) deckt den Mittelabfluss aus der Investitionstätigkeit (91,9 Mio. DM) und aus der Finanzierungstätigkeit (180,6 Mio. DM) in vollem Umfang.” (Mainova, annual report, 1999: 18)*

However, Frankfurt's utility had to face an important decrease in water consumption. While Frankfurt's population increased by 8.5% in the last two decades from 634,357 inhabitants in 1990 to 688,249 inhabitants in 2010, water consumption decreased by 14% in the same period, from 40,90 million m<sup>3</sup> per annum in 1990 to

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<sup>39</sup> ZfK, Frankfurt startet Umgründung, July 1994, p.2

<sup>40</sup> ZfK, Mainag bleibt Thema, Mai 1996, p.6

<sup>41</sup> ZfK, Frankfurts weg zur Holding, April 1995, p.4

35,16 million m<sup>3</sup> in 2010 (Boot, 2013). This decrease in consumption represented a real challenge for the utility, which saw a diminution of its sales revenues from water.

*Power distribution and actors' strategies in reforming water services*

In Frankfurt, debates on a reform of urban services started in the beginning of the 1990s in a context of municipal financial crisis and a poor performance of the utility. Political debates did not solely focus on water policy or urban services in general but tended to put the performance of Frankfurt's public administration into perspective. Between 1990 and 1994, Frankfurt experienced a challenging financial situation. In 1991, Frankfurt made a deficit of €101.7 million. Between 1990 and 1994, its budget credits increased by 40% to reach €3.3 billion (Müller, 1997: 5–6). It was defined as one of the most important financial issues encountered by the City of Frankfurt and pushed the state administrative authorities to forbid a further increase of the municipal deficit<sup>42</sup>. In this context, a program of consolidation of the municipal budget was launched by the former SPD treasurer Martin Grüber and the mayor. The program was expected to result in cost reductions within the municipal enterprises including employee reduction, an outsourcing of administrative tasks, and a corporatization of the municipal utility. Reforming the utility was intended to allow it not only to reduce its deficit and its contribution to the municipal debt but also to prepare it for the future liberalization of the energy sector. The debates on reforming Frankfurt's urban services emerged in this context.

Actor coalitions supporting a reform: The first step of the reform was taken on June 24, 1994, when the city council decided to transform the utility into a company with limited liability (*GmbH*)<sup>43</sup>. This project was discussed and passed at the city council in September 1994 by a large majority and implemented the following year. The necessity of transforming SWF was acknowledged by the utility's management board itself (efficiency issues) and by the municipality (budget issues), but the prerequisites were to maintain the cross-subsidies and to exclude participation by a private company. Thus, the CDU agreed with the project of transforming SWF into a *GmbH*, but set several conditions: it insisted on limiting the

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<sup>42</sup> FR, Städtischer Haushalt. Roth ruft Parteien zu Beratungen, 21.03.1996, p.22

<sup>43</sup> ZfK, Frankfurt startet umgründung, July 1994, p.2

market commitment of the new utility in order to avoid risks, maintaining the cross-subsidies in order to finance the deficit for the public transportation, and pursuing the utility's main goal of delivering an affordable and high quality product to the local population<sup>44</sup>. This change was expected to result in a staff reduction (from 6,500 to 4,500 employees), the improvement of the utility's efficiency, more product development, and a closer relationship to the client. Although a total cost reduction of €28.1 million yearly was expected<sup>45</sup>, the program launched by the treasurer was directly evaluated by members of the city council as not meeting its objectives. In 1995, SWF thus had a deficit of €71.5 million despite rationalization measures<sup>46</sup>. A deficit of €89.4 million was expected by the managing director in 1996. To him, the deficit was mainly caused by a reduction in profits in the electricity business and the purchase of Frankfurt Airport shares<sup>47</sup>.

*„Im Jahre 1997 hatten die SWF ein Eigenkapital von nur noch 8%, dramatisch schlecht. Sie haben kaum noch Kredite bekommen. Also 92% des gesamten Geldes, was im Unternehmen bewirtschaftet wurde, war kein Kapital, sondern Kredite, wo noch Zinsen zu zahlen waren.“ (FC2)*

In this context, the municipality had either to pay a three digits million amount in order to bailout the utility or find an alternative: privatizing or merging with Maingas, a solution which had already been debated in the city council during the first half of the 1990s (FC2).

The merger proposal was developed by the CEOs of both utilities, Dr. Stien and Jürgen Wann with the support of consultants from A.D. Little<sup>48</sup>. To them, the utility had to be integrated to a holding that would maintain the cross-subsidies for public transportation. This holding was supposed to manage 100% of the shares of the public transportation and at least 50% of the distribution utility. This construct was expected to reduce the costs by avoiding multiple investments and material redundancy among the various urban services managed by the municipality. Within the city council, Petra Roth, the new CDU mayor elected in 1995, supported this project<sup>49</sup>. The mayor was a central actor in this political debate. Her powerful

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<sup>44</sup> CDU political demand, parliamentary document, 07.06.1995

<sup>45</sup> Protzmann (SPD), parliamentary document, city council plenary session, 8.06.1995

<sup>46</sup> FR, Der Schuldenberg der Stadtwerke türmt sich weiter auf, 16.07.1996, p.17

<sup>47</sup> FR, "Die Stadt hat uns ausgepreßt wie eine Zitrone", 03.05.1996, p. 22

<sup>48</sup> FR, Stadtwerke Anteile für Maingas, 24.01.1996, p.20

<sup>49</sup> FR, Das Bundeskartellamt ist schon aufmerksam geworden, 09.03.1996, p.17

position came from her close relationship with a great number of actors involved in the decision-making process. She could rely on the support of her political party and on the management boards of SWF and Maingas. She was a member of the supervisory board of both utilities, and also became a member of the Thüga advisory board and member of the PREAG supervisory board<sup>50</sup>. She also had tight relationships with the private operators, which were supporting her solution. In order to reinforce her coalition and enhance the likelihood that her solution would be adopted, the mayor organized various meetings with political stakeholders in order to convince them, and also attempted to push them to decide as soon as possible. On March, 20, 1996, the mayor organized a round table discussion in order to debate the various alternatives with the SPD and to find a solution for the utility reform. The Green party denounced this round table meetings as a strategy by the mayor to obtain the SPD's support<sup>51</sup>. Based on the experiences of utilities, these actors argued that such a private partnership would not reduce public control over Frankfurt's urban services. Through such discussions about other models, Frankfurt local decision-makers could precisely identify various privatization paths (how many shares have been sold to whom) and their consequences. This alternative found a large endorsement inside the CDU on condition that the city should keep the absolute majority of the shares in the new utility. At the utility level, the SPD staff group also decided to support the mayor's project since it would allow the utility to reorient its strategy and reorganize its activity regarding regional water and energy management<sup>52</sup>.

The Frankfurt Green treasurer nominated in 1993, Tom Koenigs, was against the utility integration<sup>53</sup>. In 1995, during a workshop on the future of the municipal enterprises, he took a clear stance on the necessity to privatize the utility. He argued in favor of selling 49% of the utility's shares to strategic investors outside the energy sector, such as telecommunication enterprises, and creating citizens and employees' shares<sup>54</sup>. The water and electricity businesses should be integrated in a holding company with the public transportation in order to maintain the cross-subsidies. As treasurer and member of the Green party, his position in the game pushed him to find

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<sup>50</sup> FR, Stromkonzern-Posten bringen Roth in die Kritik, 22.11.1996, p.22

<sup>51</sup> FR, Städtischer Haushalt, 21.03.1996, p.22

<sup>52</sup> FR, SPD-Betriebsgruppen. Beschäftigte für Fusion von Stadtwerken und Maingas, 03.05.1996, p.22

<sup>53</sup> ZfK, Frankfurt auf Partnersuche, May 1995, p. 24

<sup>54</sup> FR, Stadtwerke.Kaemmerer möchte 49 Prozent abgeben, 29.04.1995, p.17

a compromise between partially contradictory goals, namely to deal with the financial deficit of the utility and to make it more competitive, while remaining in line with his political party. For the Green party, a major issue was keeping municipal influence over the local distribution policy and especially over the environmental policy. For Koenigs, this solution would enable SWF to expand its business in new sectors through the cooperation with non-energy investors — such as telecommunication enterprises for instance — and would give the utility the opportunity to invest in new sectors and therefore increase its sales revenues<sup>55</sup>. In addition, 30% of the shares were to be sold to citizens and employees in order to maintain the utility's local roots. The treasurer wanted to keep the local distribution policy under control and consequently to exclude Thüga from the deal. In order to impose his model, the treasurer relied on the media, where he asserted that his solution had already been approved by the city council<sup>56</sup>. He also tried to convince the local decision-makers through an economic comparison that his solution was the most appropriate. His project was strongly endorsed by the Green Party and by the SPD technical expert, Klaus Traube. Both also campaigned against a partnership between Maingas and SWF.

Financing public transportation was a central issue for the SPD, whose support was essential for the adoption of one of the projects. Because of this strategic position, the SPD attempted to impose its own terms: no degradation of service quality, maintaining steady prices for public transportation, and securing employees' social status<sup>57</sup>. The CDU and the Green parties attempted to build a coalition with the SPD. However, no agreement could be reached within the SPD party<sup>58</sup>. One section, including the SPD head, Dürr, and the SPD head within the city council, Pusch, supported the mayor's project and argued that there was no concrete proof of PREAG's influence over SWF<sup>59</sup>. Another part of the SPD, including energy expert Klaus Traube, supported the treasurer's project as a good strategy to avoid the influence of the energy operator. Moreover, both camps argued that it was necessary to take time in order to define and construct a reliable strategy of privatization

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<sup>55</sup> FR, Stadt will Stadtwerke verkaufen, 28.04.1995, p. 23

<sup>56</sup> FR, Koenigs will durch die Privatisierung der Stadtwerke 400 Millionen Mark einnehmen, 05.03.1996, p.18

<sup>57</sup> FR, SPD sucht den Schulterchluss mit der Gewerkschaft, 11.03.1996, p.15

<sup>58</sup> FR, SPD uneins über Maingas-Beteiligung, 12.04.1996, p.18

<sup>59</sup> FR, Dürr: kein Bedanken über Maingas Beteiligung, 03.04.1996, p.28

instead of trying to privatize as soon as possible. The SPD's non-action might have derived from conflict inside the party but could also have been a strategy for the municipal election of March 1997<sup>60</sup>. Because of this failure to make a decision, the SPD was criticized by the Green city council members as having a hidden agenda<sup>61</sup>. In order to find an agreement, a commission made up of various SPD experts (environment, planning, urban) had to develop a clear proposition for the party convention on November 15 and 16, 1996<sup>62</sup>. While a faction of the SPD rejected the cooperation with Maingas because of the potential influence of PREAG, the SPD's leadership would agree to support this alternative if Thüga's shares remained under 25% and if a contract on an environmental distribution policy was conducted. Shortly before the SPD convention, the energy expert Klaus Traube, who was also against a take-over by Maingas, suggested a compromise. Instead of a take-over, both utilities should merge. According to Traube, this solution might reinforce both utilities without giving a private energy operator too much influence on the local distribution policy. In the new utility, Thüga's shares would be reduced from 36.2 % to 20 or 18% and the operator would therefore lose its right to exercise its blocking minority vote<sup>63</sup>. With this model however, the city would not generate a profit from the transaction. This alternative — which was intended to give less power to Thüga in the Frankfurt distribution services and to generate less profit for Frankfurt — was the basis for the agreement between the SPD and the CDU on a utility integration with Maingas.

In Frankfurt, the debates on reforming urban services were essentially centered on the best way of reforming the utility and on having Thüga as a partner. The main stake was to transform the utility into a profitable and competitive enterprise, while maintaining the financing of public transportation through cross-subsidies and the municipal control over the SWF. According to Maingas's CEO, Maingas was the third largest gas provider in the region and an efficient utility<sup>64</sup>. A partnership between SWF and Maingas would reinforce both enterprises and be an essential prerequisite for the good functioning of the future utility and its preparedness for the liberalization. To Roth, selling the utility to Maingas would be

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<sup>60</sup> FR, SPD Kommission über Stadtwerke-Zukunft, 26.06.1996, p.24

<sup>61</sup> FR, Grüne sehen doppeltes Spiel, 09.04.1996, p.15

<sup>62</sup> FR, SPD – Wahlprogramme: Ja zu Stadtwerke-Fusion, 01.11.1996, p.20

<sup>63</sup> FR, Trick gegen die Strom-multis, 15.11.1996, p.22

<sup>64</sup> FR, Maingas heizt die Preise an, 18.07.1996, p.14

the best strategy in order to keep control over the energy and water distribution, since the municipality is the major shareholder of Maingas<sup>65</sup>. Koenigs argued that the city would obtain much more money if the transaction occurred through the market. The treasurer based his project on three reasons. First, privatizing the utility by publicly listing it would increase the utility's sale price. The transaction was expected to generate around €204.5 million for the municipality. Without competition, Thüga would pay 2 to 3 times less than the market price<sup>66</sup>. According to Koenigs, the transaction would be too favorable to Thüga<sup>67</sup>. On the one hand, Thüga would repay the sale price after three years. On the other hand, the city would still have to deal with public transportation deficits but with €15.34 million less yearly because of the sale of the profitable businesses to Thüga. Second, cooperating with international investors was expected to make the utility more competitive. The treasurer suggested two investors, who however should not obtain more than 10% shares each. This strategy would bring international know-how in the utility without leaving international players governing it. A partnership with Thüga would reinforce PREAG's monopoly in Frankfurt and make the municipality lose its control over the local distribution policy. PREAG's influence was already noticeable through Thüga in Maingas and also because it was the main energy wholesaler to Frankfurt's utilities. Indeed this company already had shares in the Maingas and also provided 60% of the electricity to SWF<sup>68</sup>. In contrast, dispersing the shares among several private investors would reduce their influence over the business and safeguard municipal control over the utility.

Actor coalitions challenging the reform: Only a few actors opposed a reform of the municipal services. During the corporatization process, the trade union was expected to be integrated into the decision-making process and to be able to negotiate the reorganization of the utility with the local decision-makers. Despite an expected lay-off of more than 1000 employees and a general fear among the utility's staff, the reform was not contested by employees, through, for instance, demonstrations or

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<sup>65</sup> FR, Stadtwerke-Anteile fuer Maingas, 24.01.1996, p.20

<sup>66</sup> FR, Koenigs will durch die Privatisierung der Stadtwerke 400 Millionen Mark Einnehmen, 05.03.1996, p.18

<sup>67</sup> FR, Koenigs: "Die Thüga macht den besten Schnitt", 27.04.1996, p.16

<sup>68</sup> FR, Stadt will Stadtwerke verkaufen, 28.04.1995, p.23



strikes<sup>69</sup>. As the following quotation makes clear, the corporatization process and cost reduction was carried out in a way that attempted to take employees' interests into account.

*“Mein Ziel ist und bleibt es, die Umgründung der Stadtwerke weiter kooperativ mit den Mitarbeiterinnen und Mitarbeitern, mit den Personalräten und mit den Gewerkschaften voranzutreiben. Zweitens: Es ist kritisiert worden, daß die Reduzierung des Personals bei den Stadtwerken, die Teil der Umstrukturierungsüberlegungen ist, von jetzt rund 6.000 auf 4.800 Mitarbeiterinnen und Mitarbeiter am Ende des Prozesses nicht möglich sei. Ich muß dem entgegenhalten, daß eine solche Personalreduzierung möglich und notwendig ist. Ich will, gerichtet an die Mitarbeiterinnen und Mitarbeiter der Stadtwerke, eines sagen, und ich habe das auch öffentlich sehr deutlich gemacht: Wir wollen die notwendige Reduzierung der Stellenzahl bei den Stadtwerken ohne betriebsbedingte Entlassungen erreichen. An die Adresse der Mitarbeiterinnen und Mitarbeiter der Stadtwerke sage ich, daß viele Arbeitnehmerinnen und Arbeitnehmer in Unternehmen, die vor Umstrukturierungsnotwendigkeiten stehen, froh wären, wenn ihr Arbeitgeber ihnen gegenüber diese Aussage treffen würde. Ich appelliere an die Einsicht in die Notwendigkeiten und an die Bereitschaft zum Mitziehen.“ (Von Schoeler, former SPD mayor, parliamentary document, city council plenary session, 16.06.1994)*

Following the corporatization however, the implementation of the program was criticized for having excluded employees from the reform process. Despite a widespread agreement within the city council, the SWF corporatization was not fully endorsed by employees<sup>70</sup>. This project was criticized by the works council as being overly focused on staff reductions. Several members of the city council — above those from the Green party — denounced the mayor's intentions to sell the utility to private partners and threaten the integration of the utility. For them, a corporatization was the first step to a material privatization<sup>71</sup>.

Although few actors struggled against the utility's reform, many protested against the treasurer's privatization project. To put it another way, the mayor's integration project was more accepted by the local actors than the treasurer's project. For a flank of the CDU, a privatization would have been justified within the context

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<sup>69</sup> ZfK, Frankfurts Weg zur Holding, April 1995, p.4

<sup>70</sup> FR, Gewerkschaft protestiert gegen "Verwaltungs-Reform von oben", 10.11.1995, p.21

<sup>71</sup> Sikorski (Grüne), Parliamentary document, city council plenary session, 08.06.1995

of a competitive market, which was not the case for SWF<sup>72</sup>. BUND, an environmental association, argued against the utility's privatization on the grounds that water management, as part of the *Daseinsvorsorge*, had to remain in municipal hands<sup>73</sup>. They argued that water management was a public duty and introducing a private operator in this business would result in neglecting environmental aspects in favor of profitability. For several members of the Green party however, privatization was expected to result in short term profits but have in turn catastrophic effects on the utility's long-term economic development, especially if the municipality aimed to sell just the profitable businesses. The mayor publicly criticized the treasurer's project as leading to a disintegration of the utility through the sale to several investors and decried the fact that he publicly acted as if his project had already been accepted<sup>74</sup>. The mayor's project was probably accepted because it was first a merger between municipal utilities and not international call for tender, and second because Thüga had a solid reputation at the local and regional levels.

When the merger found the CDU and SPD support, several Grüne members of the city council still tried to impede the reform by exerting pressures on the mayor. They argued that such a solution would jeopardize the principle of cross-subsidies since a private operator would seek just to participate in the profitable businesses of the new utility and leave public transportation to the municipality. Furthermore, many political actors from the Green Party decried the mayor's privatization project as being too complicated ("*Schachtelkonstruktion*")<sup>75</sup>. They denounced her business relationship with the private operators that she was supporting. Several members of the city council used the mayor's relationships with the private operator to counteract her project. Indeed, Roth was denounced by the Greens and the SPD for her positions on the supervisory boards of Gas Union and Thüga and on advisory boards of Ruhrgas and PREAG<sup>76</sup>. Arguing that these positions represented a conflict of interest and largely contributed to the decision of the mayor to sell the utility to Maingas, they asked her to leave these positions if she wanted to be able to support her project. Otherwise they would request a legal

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<sup>72</sup> FR, CDU-Mittelstand kritisiert Privatisierungskonzept, 08.06.1995, p.26

<sup>73</sup> FR, BUND gegen Privatisierung, 27.07.1995, p.19

<sup>74</sup> FR, Roth wird eine "Zerschlagung" der Stadtwerke nicht zulassen, 06.03.1996, p.22

<sup>75</sup> FR, Grünen gegen Beteiligung, 25.01.1996, p.19

<sup>76</sup> FR, Stromkonzern – Posten bringen Roth in der Kritik, 22.11.1996, p.22

investigation from the state interior ministry<sup>77</sup>. They also tabled a motion against the merger, which however was defeated, since the SPD and CDU defined the treasurer's model as unrealistic<sup>78</sup>. On January 30, 1997, the city council decided to conduct a merger between Maingas and SWF. The conditions needed to be discussed with the various stakeholders, especially Thüga. During that time, several actors attempted to influence the outcome of the decision-making process by speeding it up. For instance, the SWF's CEO argued that the change had to take place before the implementation of energy deregulation in order to ensure the utility would be better prepared for it.

The relationships between local decision-makers and private operators:

During the SWF reform, several external actors played a crucial role in the decision-making process. First, with the intention of working out the details of the reform project, local decision-makers drew on support from consulting groups: Arthur D. Little, one of the largest consulting groups in strategy worldwide, and Wibera — a German consulting group specialized in public institutions<sup>79</sup>. These actors were directly involved in the working out of technical solutions linked to the utility's problem. Through the preparation of expertise they guided the municipality and the utility's management board<sup>80</sup>. During the first reform, ADL had already examined the possibility to merge SWF and Maingas<sup>81</sup>. The consulting group could rely on the support of both utilities' CEOs.

At the center of the debates on SWF's reorganization was the issue of a partnership with Thüga — subsidiary of PREAG — whose head office is based in Munich. This company had cooperated with Frankfurt's municipality in the gas sector since 1928 and held 36.2% of Maingas's shares. During the 1990s, Maingas was, in contrast to SWF, a very profitable utility with a high shareholder's equity (*Eigenkapital*). In 1994, SWF benefitted from the profit made by Maingas, which paid €40.9 million to the city<sup>82</sup>. Thüga was therefore seen by a great majority of local decision-makers as a legitimate and trustworthy partner. Furthermore, PREAG, Maingas's wholesaler, had a solid relationship with the Frankfurt municipal authority

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<sup>77</sup> FR, Bleibt Roth Aufsichtsrätin, fordern die Grünen Kommunalaufsicht, 04.12.1996, p.20

<sup>78</sup> FR, SPD und CDU wollen Verhandlung über Fusion, 22.01.1997, p.19

<sup>79</sup> ZfK, Mainag bleibt Thema, Mai 1996, p.6

<sup>80</sup> Protzmann (SPD), Parliamentary document, city council plenary session, 08.06.1995

<sup>81</sup> FR, SPD vertagt Entscheidung, 04.05.1993, p.23

<sup>82</sup> FR, Der Schuldenberg der Stadtwerke türmt sich weiter auf, 16.07.1996, p.17

and the idea of cooperating with this operator through the utility already emerged during the first phase of reorganization.

*“Ich bin dennoch davon überzeugt, daß die VEBA und ihre Tochterunternehmen, vor allem die PreussenElektra, auch künftig in allen Fragen, die uns berühren, partnerschaftlich mit der Stadt zusammenarbeiten. Denn Frankfurt am Main ist nach wie vor ein bedeutender Kunde. In der Maingas Aktiengesellschaft arbeiten wir mit einem Tochterunternehmen des VEBA-Konzerns partnerschaftlich zusammen, und das soll auch so bleiben. Dazu habe ich dem Vorstand der VEBA die Bereitschaft der Stadt signalisiert, und dies ist auch im Interesse des Unternehmens, wie mir der Vorstand versichert hat.” (Von Schoeler, former SPD mayor, parliamentary document, city council plenary session, 24.05.1994)*

The merger project was also supported by the Chamber of Commerce and Industry (henceforth CCI), who represented the interest of over 62,000 firms active in the Greater Frankfurt Area. The association wrote a letter to the city council in order to encourage the cooperation with Maingas<sup>83</sup>. They expected that this transaction would result in a price drop for distribution services. CCI also expected Maingas to be a strategic partner for the utility that would be accepted by the population, and that it would assist in the reorganization of the water management in the south of Hesse. This long-term cooperation through Maingas limited other competitors' chances to participate in the SWF's management.

Despite the fact that Thüga was seen as a strong partner by a great majority of the local decision-makers, other actors argued that through such a partnership the municipality might lose its influence over the local distribution services. Moreover, a partnership with a private partner might, according to several actors, threaten the principle of cross-subsidies.

*“Wir werden keine Beteiligung eingehen, auch keine Beteiligung in den weiteren Schritten, in der Spartengesellschaft und dem, was sich daraus entwickeln sollte. Wir werden keine Beteiligung eingehen, die uns den steuerlichen Querverbund zerstört (...).”(Pusch (SPD), parliamentary document, city council plenary session, 8.06.1995)*

In order to encourage this cooperation, Thüga and PREAG's CEOs relied on two strategies. First, the private partner attempted to improve its image by pointing out the positive consequences that a partnership with Thüga would have. Thus, the

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<sup>83</sup> FR, IHK hofft auf fallende Strompreise, 13.06.1996, p.23

former Thüga' CEO, argued that Thüga's strategy was driven by a philosophy of minority shareholding and underscored that Thüga was not interested in taking control over the municipal distribution policy. By these means, he aimed to restore confidence among local decision-makers. His discourse was also based on a technical argument. For him, conducting a privatization with a minor shareholder and a strong partner was the best way to cope with the utility's financial difficulties<sup>84</sup>. In 1996, the mayor organized a meeting with PREAG's CEO, Hans-Dieter Harig, and the treasurer Tom Koenigs<sup>85</sup>. During this meeting, the mayor and the manager attempted to convince the treasurer of the merger. He pointed out that the company's philosophy was based on the principles of decentralized leadership (*dezentrale Führungsprinzip*) and taking corporate responsibility. Second, PREAG attempted to rely on its existing cooperation with Frankfurt's municipal authority in the gas distribution. In January 1995, Wolf Hatje, a former PREAG manager and one of the central actors of the merger, negotiated cheaper gas supply contracts for the municipality and also offered a preferential contract, which was planned to lead to a reduction of gas costs by around €1.02 million over the next 5 years<sup>86</sup>.

Following the city council's decision to conduct a merger, a negotiation took place with Thüga. During the negotiations, two issues were at stake: political control and the financial interests. For the SPD, it was necessary that Thüga obtain less than 25% of the new utility's shares. Martin Wentz, SPD deputy mayor for urban planning refused to leave the blocking minority to Thüga whilst Glaser the CDU treasurer would have accepted this request<sup>87</sup>. However, Thüga wanted more shares than the municipality was ready to sell, and it could rely on its blocking minority within Maingas in order to abort the merger. Another important issue was keeping the cross-subsidies in order to finance the public transportation deficit<sup>88</sup>. The transaction should have been conducted in the beginning of 1998 but was postponed because of further negotiations between the municipality and Thüga. Eventually, Thüga decided to relinquish its blocking minority in exchange for financial security taking the form of fixed dividends.

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<sup>84</sup> ZfK, Thüga: Gern mit Frankfurt, Mai 1996, p. 6

<sup>85</sup> FR, Starke partner vorgestellt, 30.05.1996, p.22

<sup>86</sup> ZfK, Frankfurt auf Partnersuche, Mai 1995, p.24

<sup>87</sup> FR, Tauziehen um Fusion von Maingas und Stadtwerken, 13.02.1998, p.22

<sup>88</sup> FR (Bartsch, M.), Strom, Wärme, Gas und Wasser aus einer Hand, 28.03.1994, p. 19

*„Dann gab es noch Diskussionen: erhält die Thüga Anteile knapp unter 25% oder knapp über 25%? Das war bestimmt ein politischer Kompromiss, weil die Stadt Frankfurt gesagt hat, ich hätte gern 75,2%, denn damit hast Du, Thüga, keine Sperrminorität bei ganz wichtigen Entscheidungen. Das hat die Thüga geschluckt. Zum Ausgleich, gab es dann einen Gewinnabführungsvertrag, wo gesagt wurde: Die Thüga erhält eine fixe Dividende auf ihre Anteile, einen ganz bestimmten Betrag. Das ist auch wieder ein Wertgutachten von Wirtschaftsprüfern gewesen, die gesagt haben: was ist der Betrag, die dauerhaft eine Mainova als Dividende an die Aktionäre ausschütten kann? Und so hat die Thüga gesagt, ich habe einen Anteil der etwa ziemlich genau meinem Wert bisher an der Maingas entspricht. Jetzt habe ich einen gleich großen Wertanteil, aber an einem größeren Querverbund Unternehmen, was tendenziell mehr Chancen hat, Synergieeffekte zu erzielen und mehr auszuschütten und ich habe eine feste Garantie, die meiner Erwartung sehr gut entspricht.“ (FC2)*

On March 27, 1998, local decision-makers signed an agreement on the merger<sup>89</sup>. Maingas had to create new shares and sell them to SWF in order to reduce its influence in the new utility. SWF was transformed into a holding in the municipality's hands and obtained 75% of Maingas's shares. The merger was expected to generate an annual profit of €81.81 million for the municipality and €25.56 million for Thüga<sup>90</sup>. The integration of the gas sector into the utility was expected to bring €6.65 to €7.67 million more by cross-subsidizing the public transportation deficit. The local government believed that the merger would result in lower costs, financial benefits, and would leave the municipal utility in a better position to face the future energy sector liberalization.

*“Durch die Ausnutzung gemeinsamer Ressourcen, niedrigere Verwaltungskosten und die Erschließung neuer Märkte wird für das neue Unternehmen ein Vorteil von rund 20 Millionen Mark jährlich entstehen. Personalabbau werde es nicht geben, sicherte er zu.” (Glaser, former CDU treasurer, Frankfurter Rundschau, 28.03.1998, 19)*

On June 26, 1998, the SPD and CDU coalition voted to approve the merger of SWF and Maingas<sup>91</sup>. On August 26, 1998, Maingas's general assembly agreed with SWF for the takeover of the electricity, water, and district heating business in exchange for

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<sup>89</sup> *Ibid.*

<sup>90</sup> FR, Die Fusion, 28.03.1998, p.20

<sup>91</sup> FR, Fusion von Stadtwerken und Maingas ist beschlossene Sache, 27.06.1998, p.26

Mainogas shares amounting to €70.81 million<sup>92</sup>. The merger officially took place on October 23, 1998. According to a SPD member of the city council Franz Frey, Mainova became the fourth largest German utility and was expected to be ready for the liberalization. For Glaser, the merger was expected to offer a cheaper and environmental friendlier water and energy distribution. Moreover, jobs protection had been secured until 2006<sup>93</sup>. For the mayor, this new utility was created to contribute to the regional development of the energy and water sectors<sup>94</sup>.

*Systems effects following the reform of water services*

In the short term, merging Maingas and SWF did not lead to the expected outcomes and the utility's performance problems persisted. This situation was critically evaluated within the city council. In parallel, the utility conducted further strategic moves, such as creating Hessenwasser or taking over Thüga, in order to become profitable again. In addition to that, Hesse's cartel administration started to exert pressures on Mainova in order to force it to lower its water prices<sup>95</sup>.

Vicious circle: The merger had the advantage of being more politically acceptable and of producing less uncertainty than for instance a privatization, because it remained in keeping with the standardized organization of urban services in Germany. This reform also enabled local actors to reinforce the cross-subsidies and the synergies between the various services. However, reformers' expectations were not completely met and the newly founded enterprise, Mainova, still had to overcome a difficult financial situation. Between 1998 and 1999, Mainova's sales revenues dropped by 4.7%<sup>96</sup>. Initially, the merger was expected to support the utility in its mission of public services and improve the energy and water distribution prices for the citizens. However, the liberalization and the intensification of the competition in the energy sector forced the utility to drop its energy prices. This, associated with the ongoing public transportation deficit, had a crucial impact on the utility's economic performances. The pressures exerted by the liberalization of the energy

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<sup>92</sup> Mainova, annual report, 1998, p.10

<sup>93</sup> FR, Sondersitzung über Fusion Stadtwerke und Maingas, 29.04.1998, p.29

<sup>94</sup> FR, Versorgungsriese mit Arbeitsplatzgarantie, 11.07.1998, p.21

<sup>95</sup> FR, Landeskartellaufsicht prüft Wasserpreise, 23.02.1998, p.2

<sup>96</sup> FR (Cziesche, D.), Suche nach neuen Märkten, 25.08.1999, p.34

sector disrupted this financial equilibrium and increased the pressures on the water sector. Consequently, Mainova progressively increased its water prices in order to cope with this situation. Hence, what was represented as the solution to the problem of utility performance did not directly result in solving this very problem. These financial difficulties associated with the limited cost reduction (because of lay-off interdiction until 2006) had already led Mainova's manager in chief, Heinrich Stien, to question the advantage of the integrated form and its cross-subsidies in July 1999<sup>97</sup>. In the future, this solution would not be advantageous anymore, and each business would have to follow its own strategy. This view was also expressed in the city council as the following quotation points out.

*“Durch die zunehmende Problematik, die aus der Sparte Strom kommt, wird die Mainova künftig nicht mehr in der Lage sein, über den steuerlichen Querverbund die Verluste der Verkehrsgesellschaft voll auszugleichen. Das kann man mit den Worten, daß früher die Monopolrendite aus dem Strom-, Wasser- und Gasverkauf ein Mehrfaches der Gewinne der Unternehmen ausmachte, die in der Wettbewerbswirtschaft stehen, zusammenfassen.” (Glaser, former CDU treasurer, parliamentary document, city council plenary session, 02.09.1999)*

The tension between contradictory goals: In order to deal with this difficult situation following the merger, the management board had to take further strategic moves, which might have conflicted with the legal framework regulating the utility. First, these moves led to an increase in the utility's activity outside its local borders. Second, it made the utility invest in businesses linked with risks, which might have impacted its goal of delivering a public good for the local population. In addition to the critiques about keeping the cross-subsidies, Mainova's CEO argued in 1999 that a strategic development in the telecommunications business and the development of economies of scales through the cooperation with other operators at the regional level could save Mainova from its difficult financial situation.

*“Da wird man sich Partner suchen müssen. Dabei spiele nicht so sehr die Finanzkraft eine Rolle. Attraktiv als Partner seien Unternehmen mit denen man, neue Märkte, auch außerhalb Frankfurts, erschließen könne.” (Stiens, former Mainova's manager in chief, Frankfurter Rundschau, 16.07.1999, 21)*

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<sup>97</sup> FR (Ochs, J.), Liberalisierter Energiemarkt bringt Kommune in Schwierigkeiten, 16.07.1999, p.21



*“Unsere Marktposition als bedeutendes Dienstleistungsunternehmen für Energie- und Wasserversorgung wollen wir weiter ausbauen und dabei über unsere angestammten Märkte in Frankfurt und der Rhein-Main-Region hinauswachsen. Durch einen effizienten Spartenverbund, den wir auch im Rahmen von Kooperationen noch ausweiten und um Telekommunikationsdienste ergänzen wollen, sichern wir unsere Wettbewerbsfähigkeit.” (Mainova, annual report, 1999: 24)*

The first move was to expand Mainova’s regional activity in the water sector by the creation of Hessenwasser in 2001. Through this change, the local decision-makers expected to create economies of scale through the cooperation with other utilities in the water sector in the State of Hesse<sup>98</sup>. This reorganization of the water sector at the state level was partly a response to a state request and partly a preparation for a potential liberalization of the water sector. This enterprise was founded as a common regional utility in charge of water management and under the ownership of Mainova with (44.4%), Südhessische (33.3%) and Riedwerke (22.3%) of the shares. This cooperation at the regional level was also pushed by the State of Hesse, which wanted to have a closed water system in order to better coordinate water management at the state level (FC2). The various operators agreed to cooperate since they thought it would contribute to cost reductions.

*“Mit der Gründung der Hessenwasser verbundene wesentliche Ziele sind die Senkung der Wasserbeschaffungskosten durch Konzentration der Wassergewinnung, Reduzierung der Kapazitätsvorhaltung und Nutzung von Synergien sowie die Stärkung der Marktposition auf den Absatz und Beschaffungsmärkten.“ (Mainova, annual report, 2001, 12)*

*„Die Attraktivität eines Marktzutritts für externe Wettbewerber in dieser Region wird spürbar gedämpft und der eigene unternehmerische Handlungsrahmen auch außerhalb des angestammten Liefergebietes erweitert.“ (Mainova, annual report, 2001: 27–28)*

The second move involved the takeover of Thüga. In 2009, E.ON decided to sell Thüga in order to obtain new capital. This created uncertainty about who would acquire Thüga. In this context and in order to expand its activity, Mainova bought Thüga together with more than 50 other utilities, including the Nuremberg and Hannover utilities<sup>99</sup>. This high investment of €467 million for 20% of Thüga shares

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<sup>98</sup> FR (Gelis, J.), Die Riedwerke setzen auf Privatisierung, 12.12.2000, p.4

<sup>99</sup> GWF, Thüga-Kaufvertrag unterzeichnet, December 2009, p.971

represented a risky business for Mainova and the city of Frankfurt. This transaction was justified by Mainova's strategic focus toward a regional development in the domain of infrastructures. As explained by a manager, Mainova could also have invested the money in an international project, if it had served the well-being of the local population. However, this takeover was perceived as the most strategic move for the utility and the most accepted by the municipality.

*“Wir haben in den letzten Jahren die Auffassung vertreten, es ist für uns strategisch wichtig die Thüga zu erwerben, die ein nationales Geschäftsmodell zwischen Kommunen erwirbt, das wollen wir gerne machen. Wir wollen dieses Geschäft der kommunalen Daseinsvorsorge stärker miteinander verzahnen, da sehen wir größere Synergieeffekte und Möglichkeiten.“ (FC2)*

The takeover of Thüga has been very profitable for Mainova and this participation has greatly contributed to increasing Mainova's revenues. In addition, Frankfurt's municipality was able to consolidate its position inside its own utility and also exert influence on the other utilities within Thüga's network. Frankfurt's mayor has become not only the president of the supervisory board of Mainova, but of Thüga as well. Moreover, this decision has been considered positive inside the city council and described by the Left Party as a first and important step toward remunicipalization in the German utility landscape. Hence, despite some periods of crisis, the mayor eventually reinforced her central position in Frankfurt by having the support of the various political parties. Even if these strategic moves were necessary for Mainova, they were perceived as risky and might have affected the prime goal of the utility which is to secure the local population's water supply. However these move were supported by the local coalitions.

*“Dass sich die Mainova AG maßgeblich am Kauf der Thüga AG beteiligt hat, ist allgemein sehr positiv aufgenommen worden. Tatsächlich stärkt die Stadt Frankfurt damit ihre eigene Position und auch die Position der Bürgerinnen und Bürger, die dadurch weniger in der Abhängigkeit von wenigen Großkonzernen stehen. Das sichert auch auf lange Sicht eine größere Eigenständigkeit, da wir damit im Konzert der großen Energieversorgungsunternehmen als kommunale Familie mitwirken. Das wirkt sich am Ende auch auf die Preisgestaltung und die Energiepreise aus.“ (Becker, CDU treasurer, parliamentary document, city council plenary session, 10.12.2009)*

Conflict escalation: The SWF reform was critically evaluated inside and outside the city council. These actors called the utility's activity into question and criticized the profits generated by Thüga. However it did not result in strong conflicts between actors involved in the local water policy.

In 1998, Hesse's cartel authorities requested a control of several municipal utilities' water prices, including Mainova<sup>100</sup>. As a response to this request, Mainova's spokesperson argued that the water prices were politically set and controlled, and were in keeping with the principle of cost recovery — that is, covering the investments necessary for preparing and delivering water<sup>101</sup>. At the same time, these water prices were justified because the water sector was as more important for cross-subsidizing the public transportation sector as the energy sector was under the pressures of the European deregulation. Following a water price increase in 2000, the cartel administration of Hesse and its ministry for the environment requested that Mainova drop its water prices. They argued that such prices were derived from the monopoly situation and that Mainova profited from it. Consequently, the supervisory board decided the same year to reduce the water prices by 50 cents/m<sup>3</sup> following a motion from the CDU<sup>102</sup>. This price reduction was enacted following a change in state legislation, which aimed to abolish the tax on ground water<sup>103</sup>. Although Mainova had not increased water price increases since 2001, the cartel administration has continued to exert pressure on the utility in order to make it further reduce its water prices. The situation escalated when E.ON bought Thüga, since members of the state authorities criticized the participation of a private operator in Mainova's business. Hence, according to Hesse's former minister for economic affairs, Alois Rhiel, to whose ministry the cartel authority belongs, E.ON should not be allowed to make profit from the water sector through its shares held in various municipal utilities by its subsidiary Thüga<sup>104</sup>. In 2007, the cartel authorities were still expecting Mainova to reduce its water prices by 20%. In the meantime, private operators, such as Veolia, profited from this situation in the region and attempted to develop

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<sup>100</sup> FR (Nenninger, C.), Landeskartellaufsicht prüft Wasserpreise, 23.01.1998, p.1

<sup>101</sup> FR (Göpfert, C.-J.), Stadtwerke: Wasserpreis ist nicht überhöht, 23.01.1998, p.21

<sup>102</sup> FR (Müller-Bialon, M.), Der Kubikmeter Wasser soll bis zu 50 Pfennig billiger werden, 31.10.2000, p.23

<sup>103</sup> FR, Grundwasser-Gebühren sollen abgeschafft werden, 06.12.2000, p.26

<sup>104</sup> Hesse's Ministry for economic affairs, press release, Rhiel treibt Wasser-Kartellverfahren voran: Unternehmen in Frankfurt und Kassel sollen Preise senken, 11.12.2007

partnerships with municipalities. In addition to claiming that municipalities could rely on a private water operator in order to achieve more competitive prices, they also directly wrote to local decision-makers in order to elicit their help (PO2). Although Frankfurt had no intention of privatizing Mainova, various alternatives were prepared depending on the results of the conflict with the cartel authorities (FC2).

At the local level, several members of the city council critically evaluated the merger's economic robustness and the advantages of maintaining the cross-subsidies. Within the city council, the possibility to reduce the waterprices was debated<sup>105</sup>. In line with the cartel authorities, several member of the city council claimed that Mainova profited from its monopoly situation by increasing water prices at the expense of the citizens<sup>106</sup>, especially in a context where the private partner became fixed dividends (FC3). The utility's performance and the increase in the prices of public services, including water, resulted in criticisms of the cross-subsidies and the necessity to privatize the utility.

*“Sie haben bei der Frage zu den Initiativen der FDP zur Veräußerung der Mainova nicht gesagt, dass wir einen Teil der Anteile veräußern wollten, weil, solange die Mainova ein Monopolunternehmen ist, es natürlich kein Konkurrenzverhalten gibt. Solange die Mainova über die Gasleitungen verfügt, kann natürlich keine Konkurrenz auftreten (...). Aber was hätte denn entgegengestanden, wenn wir 25 Prozent des Eigentums an der Mainova an einen Konkurrent von E.ON veräußert hätten, nämlich an EnBW. Dann hätten wir etwas mehr Markt im Unternehmen, weil die Konkurrenz zwischen den beiden Monopolisten in der Tat deutlich geworden wäre.” (Stein (FDP), parliamentary document, city council plenary session, 22.09.2005)*

Tensions were thus still present between privatization supporters and proponents of the integrated model. Shortly after Thüga's takeover by E.ON in 2004<sup>107</sup>, debates on Mainova's integrated structure and its underlying cross-subsidies also escalated in the city council. Members of the liberal faction within the city council argued that a privatization the sale of more of the utility's shares to private operators due to Mainova's financial problems. In contrast, other members of the city council took a

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<sup>105</sup> Parliamentary document, city council plenary session, 05.06.2007

<sup>106</sup> FAG political demand, parliamentary document, 06.11.2007

<sup>107</sup> With the purchase of Thüga in 2004, E.ON became the largest player in the German water sector (Pflug, 2008: 269).

clear stance against a privatization and argued that E.ON's takeover would justify buying back Thüga's shares of Mainova.

The European Commission's attempt to remove cross-subsidies in the late 2000s sharpened the debates about this practice in the Frankfurt city council. For several members of the city council however, the utility's financial situation was directly linked to the maintenance of these cross-subsidies, and the high water prices were needed to finance public transportation.

*“Die Mainova AG missbraucht ihre Monopolstellung nicht nur bei den Gaspreisen, sondern auch bei den Preisen für Wasser. Da die Frankfurter BürgerInnen mangels Wahlmöglichkeiten nicht zu anderen Wasseranbietern wechseln können, müssen sie vor monopolistischen und willkürlichen Preisen der Mainova AG geschützt werden. Für die Annahme des Wirtschaftsministers Rhiel, dass die Preise der Mainova AG für Wasser überhöht sind, spricht, dass die Mainova einen Gutteil ihrer Gewinne an die Stadtwerke Frankfurt Holding GmbH abführt, die damit u.a. den defizitären Busverkehr und die Bäder finanziert.” (Brillante (FAG), parliamentary document, city council plenary session, 06.11.2007)*

Other members of the city council criticized the transparency of Frankfurt's supply policy. They claimed that integrating the various sectors and the underlying cross-subsidies were not an efficient way of managing urban services and would just serve local decision-makers as a political instrument for manipulating the pricing of the services and gaining or maintaining a good reputation among the local population.

*“Der Kollege Wagner hat gesagt, es sei eine geschätzte Zahl, es ist eine politische Zahl. Sie können es auch nicht sagen, und ich sage Ihnen, die zwei Unterlagen, die die Frau Kollegin Rinn aus den Gesprächen mit der Mainova mitgebracht hat, deuten überhaupt nicht auf die Notwendigkeit der Gaspreiserhöhung hin, sondern beziehen sich nur auf Teilberechnungen. Dass nur rund 50 Prozent des Geschäfts der Mainova das Gasgeschäft sind, das verschweigen Sie. Die Mainova beschränkt sich nur auf den Gassektor und bezieht sich nicht auf die Gesamtkosten, die das Unternehmen zu bewerkstelligen hat.” (Stein (FDP), parliamentary document, city council plenary session, 22.09.2005)*

Despite these attacks on the utility's structure and functioning, the great majority of the local decision-makers considered the reform the right decision and kept defending the cross-subsidies as a major instrument of the local distribution policy. Two main types of argument could be found among proponents of the retention of

such an organizational arrangement. The first argument is value-based: Such a principle is necessary for the well-being of the local population and the independence of the municipality. This form fits better with the other institutional principles such as *Daseinsvorsorge* and municipal self-government. Other arguments are more technical: Cross-subsidies were necessary in order to maintain low prices for public transportation. As claimed by the mayor in 2007, a disruption of the cross-subsidies would have tragic financial consequences for public transportation and even for other municipal utilities in Frankfurt<sup>108</sup>. The two following quotations summarize various arguments made by local decision-makers to defend the cross-subsidies.

*"Für die kontinuierliche Erfüllung kommunaler Aufgaben ist kommunales Eigentum jedenfalls unverzichtbar. Mit Schlüsselfeldern kommunaler Daseinsvorsorge in privatisierter Form sind die Kommunen und deren Einwohnerinnen und Einwohner künftig von der Unternehmenspolitik privater Anbieter abhängig. Weiterhin können dann auch die Defizite in anderen Bereichen, besonders im öffentlichen Nahverkehr, nicht mehr im Rahmen des sogenannten Querverbundes ausgeglichen werden. Dies gilt insbesondere bei dem ins Auge gefassten Verkauf von Mainova-Anteilen. (...). Konkret werden bei einer rigorosen Privatisierung von Kommunalvermögen die finanziellen und ökonomischen Fundamente der kommunalen Selbstverwaltung eher ausgehöhlt, als dass sie die Kommunalhaushalte dauerhaft sanieren würde. Diese Privatisierungen sind insgesamt ein Verstoß gegen kommunalpolitische Postulate und gegen das Verfassungsrecht. Denn das Grundgesetz verpflichtet uns, die kommunale Selbstverwaltung und damit auch ihre Grundlagen zu erhalten und auszubauen." (Halberstadt (PDS), parliamentary document, city council plenary session, 19.12.2002)*

*„Natürlich haben wir, wenn wir uns den öffentlichen Nahverkehr anschauen - jetzt einmal losgelöst von der Frage der Gaspreissituation -, die Situation, dass wir nicht die Kosten, die im öffentlichen Nahverkehr anfallen, eins zu eins an die Kunden weitergeben. Das können Sie kritisieren, dann müssen Sie aber auch sagen, dass Sie dagegen sind. Dann erklären Sie den Leuten, Sie wollen ab morgen die Preise im öffentlichen Nahverkehr der Kostensituation anpassen. Dann wird Ihre Argumentation aufrichtig, und dann können Sie das gerne tun. Wenn Sie das nicht tun, sind Sie wieder bei der gleichen Fragestellung, an der auch wir angelangt sind, nämlich, wie wir die Strukturen miteinander austragen.“ (Becker, CDU treasurer, on the maintain of the cross-subsidies, parliamentary document, city council plenary session, 22.09.2004)*

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<sup>108</sup> Roth, CDU Mayor, Parliamentary document, city council plenary session 03.05.2007

*Summary of the case*

In summary, Frankfurt represents a typical case of transformation of German urban services. It is an interesting case of minor adaptations in urban services following the emergence of pressures from the environment on the utility. The reform that was brought about remained in keeping with the intrinsic properties of the German model of urban services. Without carrying out a major change in its organization, Frankfurt's urban services established a partnership with a private actor who has had relatively little influence on the local water services. In addition, this partnership was not established through an international call for tender. In this case, the water distribution services were already integrated with other urban services and enabled the municipality to profit from cross-subsidies. The interdependencies between the central actors were framed by the state regulation of Hesse, where local government has always kept a strong control over the utility — although this influence decreased over time. Through the integration of gas with the other services, local decision-makers reinforced the organizational synergies as well as the cross-subsidies. Finally, investments in infrastructure remained relatively stable during the period of investigation. During the middle of the 1990s, the reform of SWF was put on the political agenda and attempts were made to privatize it. While the treasurer's alternative of privatization was rejected quite easily, the mayor's proposition of bringing together both Frankfurt urban services utilities was adopted after a corporatization. This reform was the product of a strategic coalition building between CDU and SPD. Furthermore almost no actors attempted to stop the reform. As a result, urban services were integrated and partially privatized. However, the private partner had no blocking minority inside the new utility and was also a trusted and long-lasting partner of Frankfurt's local government. This reform had several consequences on Frankfurt's urban services. In contrast to what might have been expected, integrating the services did not resolve the problem of the utility's poor performances without raising the price of the services. Following the reform, financing public transportation still represented a major problem. This situation resulted in further changes in the utility, which created Hessenwasser and bought Thüga. Such moves could have been criticized by political actors as being too risky. However, they were accepted, contributed to improving Mainova's functioning, and

also reinforcing the position and the reputation of the mayor. Finally, the reform was critically evaluated and resulted in political debates inside and outside the city council on the reliability of cross-subsidies and on privatization. These debates emerged because of the prices of the water services and the revenues generated by the private partner, and escalated following Thüga's takeover by E.ON. However, these debates did not lead to strong conflicts between stakeholders and the solution adopted during the reform has been maintained.

## **The Berlin water services as a case of path-breaking**

### *Introduction: overview of the municipality and its water utility*

City profile: Berlin is both the capital of Germany (once again, since October 3, 1990) and its largest city with a current population of 3,431,675. It is the center of the Berlin/Brandenburg metropolitan region. The city's historical development has been unique. Located in the east of the country, Berlin was officially divided into two parts from 1949, with the creation of two German Republics, until 1990 with German Reunification. During this period West Berlin was isolated, and also became a crucial political issue. This specific situation had an important impact on Berlin's water management. Another peculiarity of Berlin is its administrative status. As is also the case with Hamburg and Bremen, Berlin is at once city and state (*Stadt Staat*). This gives Berlin's government great political independence, since it simultaneously governs the city and the state. Because of Reunification and of its status as a city-state, Berlin has encountered important financial problems (Halpern and Häussermann, 2003: 334). Moreover, it has one of the highest unemployment rates in Germany. In addition to the necessary investment following Reunification, Berlin lost some long-standing federal financial support during the middle of the 1990s. Its interest payments make up an important part of its expenditure. In contrast to other large German cities such as Munich, Frankfurt, or Hamburg, Berlin is not an industrial and commercial center, but an important place for public administration. In addition to the expansion of biotechnology industries, the city has been an important center for creative industries for more than a decade and has attracted a great number of companies from this sector, especially the music sector.



From the 1990s, the political landscape of the Berlin Parliament was dominated by a grand coalition, made up of the CDU and the SPD. Between 1990 and 1995 both parties governed with 40.4% (CDU) and 30.4% (SPD) of the vote respectively. During this period, the opposition was made up of the PDS<sup>109</sup> (9.2%), the FDP (7.1%) and the Greens (5%). During the next legislative term, from 1995 to 1999, the political makeup remained similar. In total, the grand coalition won fewer votes (37.4% for the CDU and 23.6% for the SPD), and the opposition, especially the PDS (14.6%) and the Greens (13.2%), gained in importance. With 2.5% of the votes, the FDP was not represented in parliament. In 1999 the trend remained the same: 40.8% for the CDU and 22.4% for the SPD. For the opposition, the results were as follows: 22.4% for the PDS, 9.9% for the Greens, and 2.2% for the FDP. Between 1990 and 2001, Berlin was governed by Mayor Eberhard Diepgen (CDU). In June 2001, the SPD, PDS and Greens tabled a motion of censure and voted the mayor out of office. New elections took place and the Diepgen government gave way to a coalition led by Klaus Wowereit (SPD), who remains mayor today. Between June and October 2001, Wowereit governed a coalition made up of the SPD and the Greens, which was tacitly supported by the PDS. In October 2001, new elections resulted in a ruling coalition composed of the SPD (29.7%) and PDS (22.6%). The CDU (23.8%), the Greens (9.9%), and the FDP (9.1%) represented the opposition. Finally, following the election of 2006, the coalition between the SPD (30.8%) and Linke (13.4%) (Former PDS) remained in office and the opposition was made up of the CDU (21.3%), Greens (13.1%), and the FDP (7.6%). Hence, the period of partial privatization took place under the Diepgen government and was characterized by a political opposition between CDU and SPD on one side, and PDS and Greens on the other. This reform has been maintained despite the relevant changes in Berlin's political landscape.

Municipal utility development: Berlin belongs to the municipalities that had already cooperated with a private partner in water management during the 19<sup>th</sup> century. For financial and technical reasons, the city council decided in 1845 to rely on a private partner to set up a central water management system for the city. In 1852, the Berlin administration signed a 25-year contract with the English company

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<sup>109</sup> The PDS (Partei des Demokratischen Sozialismus) merged with the WASG (“Arbeit & soziale Gerechtigkeit – Die Wahlalternative“) on June 2007 and became Die Linke.

Fox and Crampton for the construction of waterworks (Mohajeri, 2006: 173). However, this cooperation collapsed in 1873 because of conflicts concerning the territorial extension of the water network. The municipality bought back the utility for 703,000 pounds (Mohajeri, 2006: 176). From this rupture of contract between the municipality of Berlin and the English company, the Berlin water utility or *Berliner Wasserbetriebe* remained in public hands until the partial privatization of 1999. BWB was strongly affected by the political situation following World War 2. The utility was subject first to an administrative separation in 1949 followed by a physical division in 1961. In West Berlin, the two distinct utilities that managed water distribution and wastewater treatment were brought together in 1962 in order to cope with the city's isolated situation (Scholz, 1990: 417). In East Berlin, the water utility was reorganized into a combine, called *VEB Wasserversorgung und Abwasserbehandlung Berlin*, in 1964. Following its reunification in 1992, Berlin's water utility became the largest water utility in Germany, with 7,000 employees<sup>110</sup>. Berlin water services have neither followed the integrated model of German urban services, nor were they affected by Reunification to the same extent as other water utilities in the former GDR. Berlin's municipal services have always been managed independently of each other. Moreover, the water sanitation and distribution tasks were integrated into the same organization. This integration does not represent the organizational standard in Germany, where both sectors usually remain strictly separated.

The first transformation of the unified utility was decided upon in 1993 and took place on January 1, 1994<sup>111</sup>. The utility, which was a municipally owned utility, was transformed into a public corporation. Through this transformation, local decision-makers expected it to result in cost-reduction programs, a simplification of the organization's working processes, and increasing autonomy in the different departments. Moreover, the utility became financially independent of the municipality and could also expand its activity in other sectors and outside its local borders. However, the public form was maintained in order to preserve the water sanitation from being subject to corporate taxes. Moreover, local decision-makers thought that maintaining a public form should impede BWB's partial privatization.

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<sup>110</sup> BWB, Annual report, 1992, p.12

<sup>111</sup> BWB, annual report, 1994, p.11

Despite keeping its public form, BWB was partially privatized in 1999. This break with the established model of German water management was the product of considerable legal and political work by various actors. This led to a complex legal model, which also represented a cognitive barrier for several private operators interested in the water business in Berlin.

*„Die Anstalt des öffentlichen Rechts ist ja eher hinderlich gewesen für einen Verkauf, weil es ist ein sehr kompliziertes Modell, was wir hier letztlich finden mussten und es ist auch teilweise nicht verständlich zu machen gewesen.“ (BC6)*

The partial privatization took place in the late 1990s, in a period when the privatization of urban services — and especially water — was regarded as the solution to local problems of water management and municipal financial difficulties. In total, BWB's partial privatization required two years of political debates concerning the appropriate model and one year of bargaining with the private operators interested in a partnership. The *BWB Beteiligung AG* was created and transferred into the hands of the private investors (45% Vivendi, 45% RWE and 10% Allianz)<sup>112</sup>. This joint-stock company obtained 49.9% of the shares of the *Berlinwasser Holding AG* (BWH). Selling shares of BWB while keeping it under public law required an important legal work. This construct was characterized by the introductions of silent participations between the holding and BWB and between the private partner and the holding, and of two complementary agreements that define the utility management and nomination of the supervisory board members (for more details, see Wolfers, 2004: 117). Figure 13 provides an overview of the BWB's organization following the partial privatization. The transformation was a legal precedent and, according to the senators involved in the process, was expected to constitute a model for future privatizations in the German water sector.

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<sup>112</sup> Berlin Senate, Press release, Teilprivatisierung Wasserbetriebe : Senat gibt Zuschlag an RWE/Vivendi, 18.06.1999

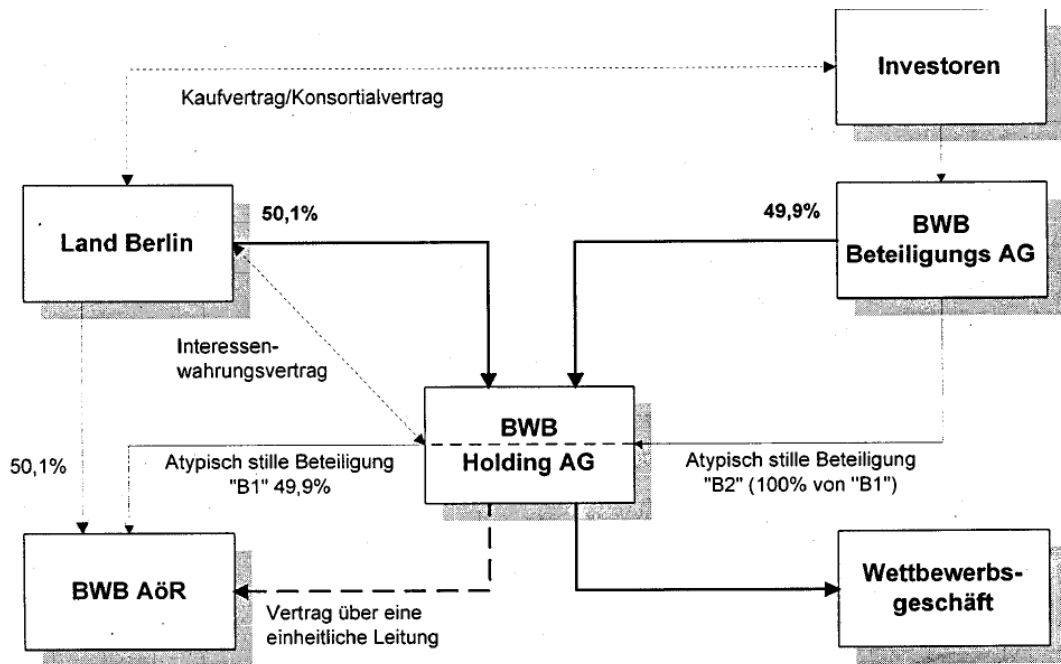


Figure 13: The formal structure of BWB following the partial privatization (Source: Berlin Parliament, BWB's partial privatization project (05.01.1999, p.5)

On October 29, 1999, the local government finalized BWB's partial privatization during a special session at the Berlin parliament and a meeting with the private partners<sup>113</sup>. Following the finalization of the call for tender, the utility was reorganized. The management board was replaced and a manager from Veolia took over as head of the board of directors. Berlin Water Holding AG's management board was governed by a manager from RWE. A technical and a human resource manager in chief from BWB were appointed to the new management board<sup>114</sup>. In 2002, due to conflicts between Berlin Water Holding and the Berlin Water Utility, the management boards of both organizations were merged into a single board<sup>115</sup>. The same year, Allianz sold its shares equally to the partners RWE and Veolia<sup>116</sup>. Some of the cost reductions occurred through the introduction of human resource management measures. Following privatization, forced redundancies were excluded from consideration and the management board had to use voluntary measures (part-time and early retirement).

<sup>113</sup> BZ (Richter, C.), Teilprivatisierung der Wasserbetriebe vollzogen, 30.10.99, p.37

<sup>114</sup> BZ, Führungsgremien der Berliner Wasserbetriebe neu besetzt, 02.11.1999, p.32

<sup>115</sup> Tagesspiegel, Wasserbetriebe mit einer neuen Führungsstruktur, 20.09.2002

<sup>116</sup> BZ (Schulte, E.), Allianz zieht sich aus Berliner Wassergeschäft zurück, 21.06.2002

„Von 2000 bis 2003 wurde ein sehr starker Effizienzsprung gemacht. Sie haben Zukunftspläne entwickelt, die von der Durchdringung im Sinne von Wirksamkeit der Planungsannahmen, Wirksamkeit der inneren und äußeren Kompatibilität, deutlich besser ist, als das vor der Teilprivatisierung da ist, bis hin zur inneren Organisation, was das Personalmanagement oder auch das Controlling und andere Funktionen angeht. Also nicht nur im technischen Bereich, sondern durchgängig im ganzen Unternehmen. Die Restrukturierung, die dort stattgefunden hat, hat zu einer insgesamt substantiellen Effizienzsteigerung geführt.“ (BC5)

„Und wir haben ein riesiges Change-Management-Programm durchgezogen, das heißt, wir haben auch wirklich alle Kosten, wir haben jeden Deckel sag ich mal umgedreht und gesagt ist sie noch notwendig diese Ausgabe oder nicht.“ (PA 4)

In addition, an important reorganization of the competitive business took place. All activities without a direct link to the core business were transferred to the holding company and the former 52 subsidiaries were reorganized under four strategic departments: operation (water management in Berlin and Region), international (Berlin Water International), services, multi-utility (non-water services)<sup>117</sup>. Lastly, the Berlin Center of Competence for Water (KWB) was founded in December 2001 by Veolia and was incorporated into a network of water research with local universities and regional small and medium-sized enterprises in January 2003. The creation of this center was not only intended to increase Berlin's research and development potential in the field of water management but also to make the city an international city for water research<sup>118</sup>.

Dates	Organizational development
1992	Reunification of both Berlin water utilities under the management of the West Berlin utility's management board
1994	Transformation of Berlin Water Utility into a public corporation ( <i>Anstalt öffentlicher Rechts</i> )
1999	Partial privatization of BWB and creation of the Berlin Water Holding with 49.9% participation of a consortium made up of Veolia, RWE and Allianz
2002	Reorganization of BWB and BWH. Creation of a unique board of direction
2002	Allianz Capital Partner sold its shares to RWE and Veolia

**Table 13: The organizational development of Berlin's water services**

<sup>117</sup> BWB, annual report, 2000, p. 8

<sup>118</sup> Tagesspiegel, Kompetenzzentrum Wasser geht an den Start, 12.12.2001

Outcome of interest: Berlin and its water services are studied as a case of rupture with the standardized organization of water services in Germany. Reforms not only occurred in several organizational practices, as it has been the case in other utilities, but also took place at the strategic level since it aimed to develop a business at the international level and invested in other sectors than its core business. In addition to that, Berlin water services belonged to the local government, who decided to partially relinquish its control over the water utility by selling almost half of the utility's shares to a private operator. This cooperation occurred through an international call for tender in order to give the local government the possibility to choose the most interesting partner. The case of Berlin is therefore an interesting case for analyzing a scenario of path breaking:

- Generally, the broad institutional context was called into question and exogenous management models — such as joint ventures or flotation — were debated within the local government and even implemented.
- Actors dealing with the reform were mainly established actors explicitly looking for a partnership with external actors.
- Alternative governance models became visible and competed with the German model of water governance. The local and public management of water services was replaced by a public-private partnership.

*Path-dependent mechanisms: keeping urban services independent of each other*

Berlin water services were not integrated to the other services and therefore the local government did not rely on cross-subsidies. The set of rules structuring the interactions between the central actors in water policy enabled the local government to exert a strong control over the utility. Moreover, Berlin water services were considerably influenced by Reunification, which led to important investment needs in infrastructure, especially in the east of the city.

Coordination between the central actors: BWB's functioning is mainly governed by two laws: The Berlin Water Act and the Berlin Utility Act. The Berlin Water Act defines the general mission of the water utility, as well as its situation of local monopoly. The second act defines its specific competencies and how the utility is governed by the actors involved in the local water policy process. Due to its status

as a city-state, Berlin's administration does not have the same relationship with the state as other cities. While a municipality usually has to ensure that the municipal utility's actions are in conformity with state regulations, in Berlin's case, the municipality can modify the regulations in order to make it fit with the utility's activity. Local political actors are therefore involved in the production of rules that govern their own action. According to several interviewees, this specific situation was an advantage during the various transformations of BWB. Thus, the senate could shape the rules, following the vote of parliament, and therefore transform the municipal utility without having to rely on state regulations.

*“Das ist natürlich der Vorteil, auch gerade für Berlin. Man macht sich das Gesetz so wie man es braucht “(P02).*

This situation therefore provided more power and independence to the local government in its interactions with the utility's management. Furthermore, BWB was a municipally owned enterprise (*Eigenbetrieb*) until 1994 and was therefore very dependent on the Berlin city administration. The utility's management board was neither able to develop an economic strategy without relying on the local authority, nor could it rely on a loan to finance the utility's investment. Under this legal form, BWB was perceived by a great number of local decision-makers as lacking economic scope of action. Thus, on September 17, 1992, during an assembly at the Berlin parliament, the future of municipally owned enterprises including BWB was discussed<sup>119</sup>. During these debates, the utilities' high dependency on the administration was used as a key argument for putting their reform on the political agenda. Local decision-makers debated the danger of inaction for the utility and its employees, and the necessity to transform BWB into a more flexible enterprise. They suggested a reform based on the following ideas: first, the water utility should be freed from the city administration and the associated political dependence in order to exploit its full economic and technical potential<sup>120</sup>. Relying on its technical know-how and its experience from Reunification, BWB was expected to expand its business outside its local frontiers, to create subsidiaries and become a major actor in

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<sup>119</sup> Parliamentary document, Sicherung der Zukunft der Eigenbetriebe, parliamentary plenary session, 17.09.1992

<sup>120</sup> ZfK, Berliner Reform, August 1993, p.9

water management. This is pointed out in the two following quotations from Berlin parliamentarians.

*"Aus diesem Grunde sollten wir gemeinsam darüber nachdenken, wie wir doch eine Veränderung in rechtlicher Hinsicht erreichen können. Es muß garantiert sein, daß die Eigenbetriebe die Investitionen selber planen und selber veranlassen, daß sie selber für Technik und Personal verantwortlich sind und daß sie auch selber für die Tarifgestaltung verantwortlich sind. Es geht doch nicht an, daß das Abgeordnetenhaus den Stellenplan beschließt, den Wirtschaftsplan, und Tarifierhöhungen, weil irgendwann Wahlen vor der Tür stehen, nicht realisiert und so die Betriebe systematisch in ein Defizit treibt. Hier muß kaufmännisches Denken einziehen, und dies ist nur der Fall, wenn die Verantwortlichkeiten in die Eigenbetriebe verlegt werden." (Landowsky (CDU), parliamentary document, parliamentary plenary session, 17.09.1992: 2831)*

*"Seit Jahren klagen wir alle, daß unsere Eigenbetriebe unflexibel sind, zu kundenfern sind und vor allem daß sie unwirtschaftlich arbeiten. Das zu beenden, dient diese Rechtsformumwandlung (...) Derzeit sind die Eigenbetriebe eingegliedert in der Verwaltung; auch bei einer Modifizierung des Eigenbetriebsgesetzes wäre der störende Durchgriff der Verwaltung und ihrer Beamten erhalten geblieben." (Kriebel (SPD), parliamentary document, parliamentary plenary session, 17.06.1993: 4230)*

BWB's transformation into a public corporation enabled it to gain greater independence from the Berlin parliament and administration while keeping a public legal form, as the trade union wished it. This reform not only led to changes in the rules driving the functioning of the utility, here the Berlin Utility Act, but also aimed at transforming it into a more cost-effective and client oriented utility in order to cope with the investments in infrastructure and keep low water prices<sup>121</sup>. In this context, BWB should even be able to generate profits, if it had the opportunity<sup>122</sup>. The parliament retained a strong influence over the utility but the management board had more autonomy and could set water prices, extend its business outside its local frontiers and create subsidiaries. Following this reform, the board of directors undertook a reorganization of the utility with the expectation of savings of €112.4 million yearly<sup>123</sup>. The following quotation shows the shift expected by local decision-makers through the utility's reform.

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<sup>121</sup> ZfK, Schlanker in die Zukunft, April 1995, p.9

<sup>122</sup> BWB, annual report, 1994, p.12

<sup>123</sup> BWB, annual report, 1994, p.47



*“Wir müssen eben diese Unternehmen auch in die Lage versetzen, sich dort engagieren zu können, wo sie tatsächlich Gewinne machen können.(...). Dies heißt nicht, daß Eigenbetriebe oder Unternehmen in anderer Rechtsform nicht auch die Möglichkeit haben müssen, Tochtergesellschaften und Kooperationen mit Privaten anzustreben, die sie in die Lage versetzen, dem Markt Rechnung zu tragen, um selbst in Marktlücken hineinzustoßen, an denen sie mitverdienen können.” (Staffelt (SPD), parliamentary document, parliamentary plenary session, 17.09.1992: 2828)*

In Berlin the local government was thus able to shape the water policy regulation and was not forced to follow rules made by state authorities. The utility also gained independence from the local government as well as economic scope of action over time.

Organizational and institutional complementarities: Berlin’s utilities have always been managed independently from each other and never relied on cross-subsidies. During the 19<sup>th</sup> century, local decision-makers had already resorted to privatization in order to finance the local infrastructure but did not integrate urban services following the remunicipalization. The integration between various urban services has always been supported by several actors as a solution but has never been adopted. This model was debated in the middle of the 1990s, but a great majority of decision-makers was opposed to such an organizational solution. The main reasons for such a decision were financial and political. Key decision-makers did not perceive the need to rely on a solution of this nature to cope with water management problems. Their argument was that Berlin is too large to rely on such an organizational arrangement and that it would not create the synergies that usually result from such integration. This argument was used by decision-makers at various stages of the policy process in order to justify why the various urban services should be managed by independent utilities (BC5; BC6; BC9).

*„Diese Beteiligungsmanagement GmbH hat schon Mitte der 90er Jahre eine Rolle gespielt. Ich hatte dazu ein detailliertes Konzept entwickelt aber wie gesagt, das ist in der Form nie zustande gekommen, weil es einige gar nicht wollten. Einige wollten lieber privatisieren und wollten gar nicht, dass alles unter ein Dach kommt.“ (BC9)*

*„Also die Überlegung zum Stadtwerke-Konzern in Berlin gab es von verschiedenen Akteuren. In allen diesen großen Organisationen gab es welche, die waren dafür, gab es welche, die waren dagegen. In der Politik gab es welche, die waren dafür und welche, die waren dagegen. Und es gibt in Hamburg keine Stadtwerke und warum soll es in Berlin welche geben. Berlin ist groß genug, dass diese Leistungseinheiten also Wasser, Abwasser zusammengefasst, oder Strom oder Gas auch als Gesellschaft alleine existieren können. Mann gewinnt dann auch auf den oberen Ebenen nicht mehr so viel an Qualität dem Bürger gegenüber, man gewinnt nur an Finanzkraft. Habe ich selbst in Gesprächen mit Staatssekretären vermittelt bekommen, also wollen wir nicht, weil das dann nachher darauf hinausläuft, dass die noch mächtiger sind als wir.“ (BC5)*

Moreover, several facts impeded the integration of the various services and the generation of economies of scope. First, the privatization of some of Berlin's municipal utilities resulted in a dispersion of shares among several private shareholders. This reduced the chance of adopting this alternative since local decision-makers should have bought back the shares first. Thus, the privatization of the gas and the electricity utilities (Bewag and Gasag) would have made it considerably more difficult to integrate the urban services together since cross-subsidies were not in the interest of private partners (BC5). Second, the various legal forms of these utilities would have required a transformation of BWB into a shareholder company, which would have resulted in the taxation of its sanitation business. While merging the services would have been difficult but possible, maintaining the utilities independent of each other was the work of actors who had the opportunity to gradually privatize the utilities. During the privatization process, several actors suggested an integration of all Berlin's public corporations together (among others, public transportation, water and waste disposal)<sup>124</sup>. Cross-subsidies were not operative in the case of Berlin. However, organizational synergies could be found in the integration of the water distribution and sanitation sectors. This specific structure was established following the creation of the WAB in the eastern part of Berlin and because of the geographical isolation in its western part in 1962. Following Reunification, this structure was preserved and even supported by BWB managers as generating a great number of synergies (financial, organizational,

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<sup>124</sup> TAZ (Koch, H.), Verdienen statt verkaufen, 22.11.1996, p.26

managerial, and geographical). According to a former BWB CEO, this integration was necessary in order to cope with large investment problems (Scholz, 1992).

Investment in infrastructure: Reunification represented an important burden for Berlin and its water utility. This event contributed to increasing the utility's expenditure, due to infrastructure investments. In contrast to other water utilities that had to cope with the challenges of Reunification alone, the former Berlin VEBWAB could rely on BWB's experience to deal with this situation. BWB could therefore bring its technical and managerial know-how in order to proceed to the unification of both water utilities. Both utilities had already started working together in December 1989. However, the poor condition of the facilities in the eastern part of Berlin — which was associated with the lack of know-how on the part of the former VEBWAB — presented challenges for the merger of both utilities (Tessendorf, 1995). Technical (pipes), managerial (finance and accounting), competencies (training for the employees of the eastern utility) and work (balance of wages and working time) homogenization was conducted during the first phase of cooperation<sup>125</sup>. On January 1, 1992, the merger of both companies took place and the management of the unified utility was taken over by the West Berlin utility's management board.

Directly after its unification, the utility had to carry out large investments to replace and modernize the infrastructure in East Berlin. Thus, between 1992 and 2000, BWB estimated investments in infrastructure by €6.65 billion with €1.53 billion for the distribution and €5.11 billion for the sewage<sup>126</sup>. Investments aimed to extend the sewage network in the eastern part of the city at the first place and rose from €144 million in 1991 to €517 million in 1994<sup>127</sup>. Investment in human resources also increased following Reunification, not only as a result of the increase in the number of employees but also because of the necessity of training them and homogenizing their working conditions<sup>128</sup>. The population shrinkage after Reunification resulted in a decrease in water consumption and therefore in a decrease of the utility's sales revenue. While BWB managers expected an increase of Berlin

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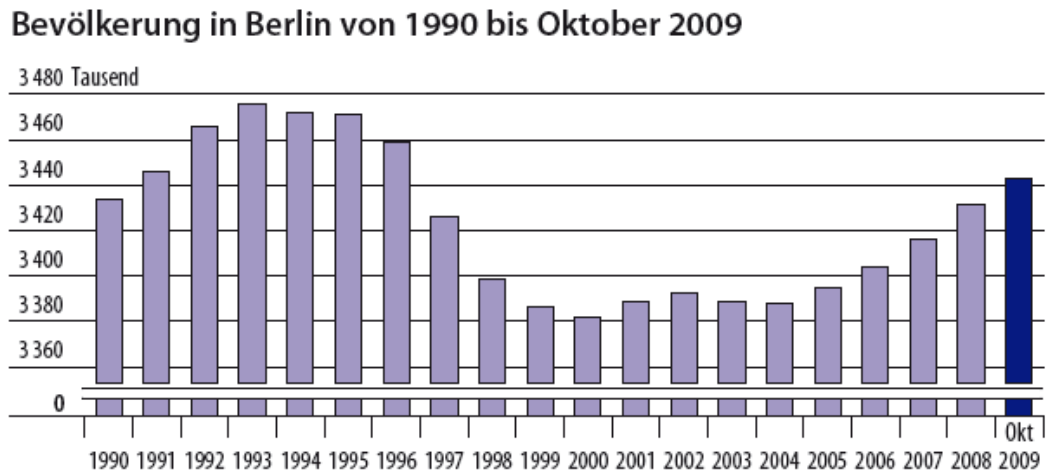
<sup>125</sup> BWB, annual report, 1991, p.12-13

<sup>126</sup> BWB, annual report, 1992, p.12

<sup>127</sup> BWB, annual reports, 1991 – 1994

<sup>128</sup> ZFK, Solange der Hauptstadt am flüssigen fehlt, January 1991, p.4

population following Reunification to reach 4 million inhabitants until the end of the 1990s<sup>129</sup>, the reverse trend was observed, as shows the following figure.



**Figure 14 : Population in Berlin between 1990 and 2009 (Source: Zeitschrift für amtliche Statistik 3/2010, p.26)**

This situation made investment financing more difficult and was used during political debates in order to justify a reform of BWB, such as its transformation into a public corporation. To cope with this situation, the board of directors had no other option but to increase water prices<sup>130</sup>. The increasing investment in infrastructure was also made difficult by the local financial context. During the German division, more than 50% of the West Berlin budget was financially supported by the German government (*Gesetz zur Förderung der Berliner Wirtschaft – Berlin FG*). After Reunification, the financial situation of Berlin began to worsen, since the financial support from the federal government toward West Berlin progressively decreased and ceased in the middle of the 1990s. Berlin’s structural deficit of €1.62 billion in 1991 thus dramatically increased to €6.3 billion in 1995 (Erdmeier, 1998: 162).

*“Das begann sicherlich so Mitte der 90er Jahre, als dann die Bestandsaufnahme über die Haushaltslage des Landes Berlins deutlich wurde, über den Rückgang der Fördermöglichkeiten durch die Bundesregierung, als sie dann sehr stark beschnitten wurden. Damals gab es das Berlin-Förderungsgesetz für die Wirtschaft, was sehr schnell heruntergefahren wurde und dann eben das Rückfahren der Zuschüsse für den Berliner Haushalt, denn zu West-Berliner Zeiten waren zum Teil 53-54% des Haushaltes direkt aus dem Bundeshaushalt*

<sup>129</sup> BWB, annual report, 1992, p.15

<sup>130</sup> BWB, annual report 1994, p.48

*finanziert. Weil das eine politische Frage, West-Berlin war war eben eine politische Frage. ” (BC9)*

From the middle of the 1990s, political measures were tabled in order to cope with Berlin's increasing financial deficit that included job cuts in public services and administration, or an increase in corporate taxes<sup>131</sup>. In this context, municipal utilities were also forced to contribute to reducing the municipal financial deficit. For that purpose, the Berlin senate for finance demanded increasing return on the utility's capital (*Eigenkapitalverzinsung*)<sup>132</sup>. This situation led to conflicts between the senator for finance, who aimed to reduce Berlin's financial deficit, and the senator for economic affairs, who cared about the utility's economical robustness. For instance, for 1998, the senate for finance expected a withdrawal of €485.7 million on the capital of the utility<sup>133</sup>.

*“Die haben jedes Jahr von dem Unternehmen etwas mehr verlangt. Da wurde 1994 eine eigene Kapitalverzinsung der BWB eingeführt. Das war damals 4%, im Jahre 1995 hat man die Deckelung hochgesetzt auf 5,2% und dann sind viele Leistungen, die damals durch Steuergeld finanziert waren, aber irgendwo einen wasserwirtschaftlichen Bezug hatten, dann hat man gesagt, diese Leistung finanzieren wir nicht mehr aus dem Steueretat, das nehmt ihr jetzt in euren Tarif rein.” (BC4)*

#### *Power distribution and actors' strategies in reforming water services*

The debates on reforming BWB took place in a broader context of the privatization of Berlin's municipal utilities and of a municipal financial crisis. While the partial privatization of the electricity and gas utilities was already put on the agenda in the middle of the 1990s, the question of how to reform the other utilities, including BWB, was still unclear and resulted in heated debates among local stakeholders.

Actor coalitions supporting the reform: While local stakeholders widely evaluated BWB's transformation into an AöR as positive (the utility succeeded in managing its investments and in 1995 even generated profits for the first time since

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<sup>131</sup> BZ, Finanzsenatorin räumt Defizite in Milliardenhöhe ein, 12.12.1996

<sup>132</sup> TAZ (Koch, H.), Ein teurer Schlag ins Wasser, 14.11.1997, p.23

<sup>133</sup> BZ (Schulte, E.), Finanzverwaltung will erneut in die Kasse der BWB greifen, 26.02.1998, p. 20

its unification)<sup>134</sup>, the municipal financial crisis, the need for investments, and a reduction of water consumption resulted in a steady price increase. In this context, reforming BWB was once again at the center of local political debates. Nominated in January 1996, the SPD senator for finance, Annette Fugmann-Hessing entered Berlin's political arena with the main purpose of dealing with Berlin's structural financial deficit<sup>135</sup>. She contributed to the creation of a political working group, “*Die Vermögensaktivierung AG*” (The working group on assets' activation), whose main goal was to organize the privatization of the municipal enterprises. In 1997 and 1998, she had already organized the full privatization of the Berlin electricity utility, Bewag and the partial privatization of the Berlin gas utility, Gasag<sup>136</sup>. Following this, the senator for finance looked for further options to cope with Berlin's deficit and decided to put BWB privatization on the political agenda<sup>137</sup>. Even before this move was officially decided on, several solutions were designed by local stakeholders in order to cope with that problem. Among the dominant coalition, there were two main models for reforming BWB.

At the end of 1996, the CDU senator for economic affairs, Elmar Pieroth, suggested that the municipal utilities should be transformed into joint stock companies in order to make them more competitive and cope with the financial crisis<sup>138</sup>. His project was to transform it into a joint-stock company and sell up to 49% of the shares to private investors<sup>139</sup>. This solution was supported by BWB's CEO, Bertram Wiczorek<sup>140</sup>, as well as by a great majority of the CDU parliamentary faction. This model was developed by the Roland Berger consulting group at the request of the supervisory board. Through this project, the economics senator expected to transform BWB into an international player while keeping its local autonomy. With its head office in Berlin, the local government would keep the control over BWB and the corporate taxes would be transferred into the city budget. While obtaining know-how from private operators through privatization, sector investors would be excluded from the bid in order to protect the utility's autonomy. Lastly, this model offered BWB's employees the opportunity to invest in the

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<sup>134</sup> BWB, annual report, 1995

<sup>135</sup> BZ (Preissler, I.), Die neue Finanzsenatorin, 24.01.1996

<sup>136</sup> TAZ, Die SPD steht vor der grossen Wasserschlacht, 25.06.1998, p.27

<sup>137</sup> TAZ, Kaufen oder gekauft werden, 13.01.1997, p.23

<sup>138</sup> BZ (Schulte, E.), Wasserbetriebe stehen jetzt ganz oben auf der Verkaufliste, 17.05.97, p.11

<sup>139</sup> BZ (Schulte, E.), Krupp/Thyssen interessiert an Wasserbetrieben, 23.05.1998, p. 25

<sup>140</sup> BZ, Wasser-Betriebe: Vorstand will AG, 14.11.1997, p.22

company through the creation of shares exclusively for employees. The proponents of this model argued that this transformation would be appropriate for the long-term development of the company. However, it was criticized by several finance experts and local politicians, who claimed it would take too much time to implement — the utility had to generate profit for the municipality as soon as possible<sup>141</sup>.

In the beginning of 1997, the SPD Berlin senator for finance had already suggested drawing up a “concession model”. In this model, management would be transferred into private hands, which would also have to make investments in Berlin's water infrastructures and BWB's operating capital. The private operator would also directly bill the customers (Nickson, 1997: 174). In this case, the utility could remain a public corporation; the private partner, according to the finance senator, would pay between €1 and €2 billion to take over the utility's management, depending on the transaction's terms<sup>142</sup>. While fiercely debated by SPD's backbenchers<sup>143</sup> — who supported in part the alternatives of the trade union of either integrating BWB with other municipally-owned utilities into a finance holding or drawing up a concession model between Berlin and BWB<sup>144</sup> — the head of the SPD group in Berlin supported this model. Hence, the head of the SPD had important political work to do in order to find the support of its political party before bargaining with the other political fraction.

*„Das muss man immer dabei bedenken: Alles was wir hier gemacht haben, alles ist über mehrere Jahre immer wieder im Landesparteitag der SPD diskutiert worden. (...) Wir haben intern diskutiert, wir haben geguckt was in der Fraktion mehrheitsfähig ist und dann sind wir natürlich damit auf den Parteitag gegangen. Und wenn der Parteitag abgestimmt hat, dann konnte es entsprechend mit der CDU verhandelt werden und umgesetzt werden und wir wussten in etwa, was machbar ist.“ (BC9)*

According to Roland Berger, the concession model — in contrast to the shareholding model — would threaten the municipal control over local water policy as well as BWB's economic development<sup>145</sup>. Peter Strieder, the SPD senator for environment and city development suggested a “consensus model”, close to the finance senator's

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<sup>141</sup> BZ (Schulte, E.), Eurawasser bietet bis zur 4 Milliarden DM, 24.05.1997, p.9

<sup>142</sup> BZ (Schulte, E.), Finanzverwaltung will erneut in die Kasser der Berliner Wasserbetriebe greifen, 26.02.1998, p. 30

<sup>143</sup> TAZ, Die SPD steht vor der grossen Wasserschlacht, 25.06.1998, p.27

<sup>144</sup> TAZ (Koch, H.), Notfalls mit Streik gegen Privatisierung, 31.01.1998, p.25

<sup>145</sup> BZ (Schulte, E.), Gutachter empfehlen Börsengang, 06.06.97, p.11

concession model. In this model, the private partner would not influence BWB's strategies and would bring €1 billion to Berlin<sup>146</sup>. Arguing that Berlin could not give up BWB's economic potential, the senator for economic affairs criticized the SPD's solution. For him, this model would lead to a centralization of the utility's management, would threaten the local value chain (since a great number of tasks would not be conducted in Berlin anymore), and would therefore contribute to an important cut in job numbers at the local level. Moreover, this model would make a strong influence from outside possible and might lead the utility to lose its know-how over the years<sup>147</sup>.

In addition to a consensus with the backbenchers of its party, the SPD senator for finance had to find a compromise with other key actors, including the CDU senator for economic affairs. On July 7, 1998, the CDU and SPD agreed to conduct BWB's partial privatization relying on a holding model<sup>148</sup>. This complex model, result of a fragile compromise, was inspired by the privatization of the *Landesbank Berlin* and enabled private partners to participate in BWB's ownership while maintaining its public form. One SPD suggestion — accepted by the CDU — was to block 5% of BWB's shares for the staff and citizens and to create a future fund (10% of the sale price) with the purpose of supporting local economic development<sup>149</sup>. Keeping the public form was important for two reasons: first, it would enable to get the support or less opposition from the trade union and second, it would maintain the sewage business as a task of public authority, and consequently free of taxes.

Following the political compromise on the privatization model, the senate organized an international call for tender and started drawing up a privatization law, which defined the cooperation between the utility and the private operator. This law had to be voted on by the parliament. To that end, a steering committee (*Lenkungsausschuss*) was created, which was made up of the three senators responsible for the utility (finance, economy, and environment)<sup>150</sup>. This steering committee was the central actor during the bid. The committee drew up the privatization contracts and the law on BWB partial privatization and made the later

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<sup>146</sup> BZ (Richter, C. & Schulte, E.), SPD favorisiert Betreibermodell für Wasserbetriebe, 19.02.1998, p. 32

<sup>147</sup> TAZ, Die SPD steht vor der grossen Wasserschlacht, 25.06.1998, p.27

<sup>148</sup> BZ (Schulte, E.), Wasserbetriebe: Mühsamer Kompromisse gefunden, 08.07.1998, p.28

<sup>149</sup> BZ, Senat beschliesst Verkauf der Berliner Wasserbetriebe, 08.07.1998, p.1

<sup>150</sup> Tagesspiegel, Entscheidung in der Milliarden Schlacht, 31.05.1999



voted by Berlin parliament, organized the call for tender, negotiated with the trade union to obtain its formal agreement on the privatization.

*„Der Lenkungsausschuss war der zentrale Ausschuss. Sie haben die Verhandlung geführt, die Investoren getroffen, die Investment-Bank-Wahl entschieden. Sie waren der zentrale Knotenpunkt, auch mit den Parteien, die in vertraulichen Sitzungen über die jeweiligen Entscheidungen informiert wurden.“ (BC9)*

The steering committee relied on several consulting groups in order to draw up the privatization model and bargain with the private operators. Three consulting groups played an important role: Merrill Lynch (for the financial part of the business), Hengeler Müller (for the juridical part) and BDO Deutsche Warentreuhand AG (for taxation and water prices) (Beveridge, 2012: 57). Merrill Lynch had an important role in the process. It first drew up a memorandum on the water utility for the various candidates<sup>151</sup> and was an important support for the senate during the bargaining with the private partners<sup>152</sup>. These actors had already started influencing the decision-making process during the drawing up of reform models. During this stage of the policy process consulting groups were hired to design and legitimize a specific solution in line with the interests of the reformers or in order to lobby with the trade union and local politicians<sup>153</sup>. They allowed the steering committee to rely on important technical, legal, and financial resources in order to drive the process. As consequence, BWB's management board was excluded from the privatization debates and the reform's implementation.

*„Also der Vorstand war ja in den Teilprivatisierungsprozessen nur beratend dabei. Also in dem Lenkungsgremium, das von der Frau Fugmann-Heesing geleitet wurde, wurde berichtet und der Vorsitzende des Vorstands der Wasserbetriebe nahm an dieser Sitzung teil und berichtete dann dem Vorstand. Ich selbst habe ihn dort einmal vertreten und kann nur sagen, das war ein typisches politisches Lenkungsgremium. Entschieden wurde politisch und an dem Tisch der Senatoren nach Beratung mit den Beratern und weniger nach Beratung mit dem Vorstand der Wasserbetriebe, wir kriegten dann mitgeteilt, was zu tun wäre.“ (BC5)*

In total, despite some conflicts between reformers, they all agreed on the necessity to rely on a private partner in order to cope with the Berlin structural deficit. The coalition made a strong argument for legitimizing the implementation of

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<sup>151</sup> BZ (Schulte, E.), Vertrauliches Bank-Konzept bei Eurawasser, 18.12.1998, p.35

<sup>152</sup> BZ, Ausschuss billigt Privatisierung der Wasserbetriebe, 19.12.1998, p.34

<sup>153</sup> BZ (Schulte, E.), Der milliardenschwere Poker um die Wasserbetriebe, 31.05.1999, p.37

this reform. This argument was based on the idea that a partial privatization was a win-win situation (BC6). First of all, they argued that the public corporation had already reached its entrepreneurial limits and that a reform was necessary in order to prepare for future changes in the German water sector<sup>154</sup>. Thus, the partial privatization would bring know-how to BWB through a cooperation with a strong partner, enabling it to improve its economic performance, which would have positive repercussions for the employees and the city<sup>155</sup>. This economical consolidation was legitimized because of BWB's mismanagement during the second half of the 1990s. The cost-oriented management of the utility would also result in a water price reduction. The profit generated by the privatization was expected to improve Berlin's economic development. By maintaining the public corporation status — responding to the trade union's demand — the sanitation business unit would not be taxed and the employees would remain under public governance. Moreover, employees' interests would be taken into account through the creation of employees' shares<sup>156</sup>. It was argued that the money was necessary for investments in other essential sectors, such as schools and nurseries. Finally, reformers attempted to legitimize their alternative by arguing that such a reform was the only alternative possible.

*„Man muss Folgendes deutlich sagen – darüber sind wir uns in der SPD einig, auch wenn es in der Presse zuweilen anders dargestellt wird – zu dieser Politik der Finanzsenatorin gibt es keine Alternative. (...). Wir werden dazu – gerade als Sozialdemokraten – eine geschlossene Darstellung bieten, weil wir wissen, dass es zu dieser Politik keine Alternative gibt. Diese gibt es nicht, weil man, wenn man die Schulen in Ordnung bringt, wenn man den Erstklässlern im September ordentliche Toiletten zur Verfügung stellen will, dafür sorgen muss, dass diese Menschen als junge Erwachsene oder Jugendliche in 10 bis 15 Jahren nicht vor einem Zusammenbrechen des öffentlichen Sektors stehen.“ (Gaudszun (SPD), parliamentary document, parliamentary plenary session, 29.04.1999: 451)*

To close the privatization process, the senate had to draw up a privatization law that had to be accepted by the Berlin parliament. The first draft of this law largely reflected the interests of the finance administration, which sought to cover the 1998 Berlin deficit at the first place. Several local decision-makers also questioned the first contract because it did not exclude a full privatization of the utility. In addition, an

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<sup>154</sup> Pieroth (CDU), parliamentary document, parliamentary plenary session, 13.11.1997, p.2689

<sup>155</sup> Pieroth (CDU), parliamentary document, parliamentary plenary session, 01.11.1998, p.3828

<sup>156</sup> Atzler (CDU), parliamentary document, parliamentary plenary session, 01.11.1998, p.3833

efficiency clause would have granted the private partner a profit increase after three years. The assembly therefore rejected this first draft presented in the beginning of 1999<sup>157</sup>. Eventually, the privatization law was modified and adopted by Berlin parliament on April 29, 1999<sup>158</sup>.

Actor coalitions challenging the reform: During the reform, several actors set themselves against BWB's reorganization. Among them, two had an important role in the decision-making process. First, the ÖTV trade union — whose function was to defend the interest of employees working within public services — exerted a crucial influence during the agenda-building phase. Second, the opposition, made up of the Green and the PDS parties, attempted to impede the implementation of the partial privatization.

The trade union was a crucial actor in the struggle against privatization<sup>159</sup>. Maintaining BWB as a public corporation was the product of the pressure it exerted on the local government. Two main reasons pushed this actor to contest a BWB corporatization and partial privatization. Firstly, they argued that this reform would result in the taxation of the sanitation business and a resultant water-price increase. Second, BWB's employees wanted to remain under the remit of public law. They even had the right to keep working in Berlin's public services and could therefore not be forced to work in a corporatized utility. This situation enabled the trade union to exert an important pressure on the local government<sup>160</sup>.

*„Das [the corporatization] ist gescheitert an dem Lobbyismus von dem Eindringen der Gewerkschaften in die politische Handlungssphäre. Also die Gewerkschaften wollten das nicht und die Politik wollte sich in dieser Frage mit den Gewerkschaften nicht anlegen. (...) Und selbst die Gewerkschafter, die bei der Gasag für die AG im Osten gestimmt haben, haben in Sachen BVG oder auch in Sachen BWB den Kollegen aus den beiden Organisationen beigepflichtet und haben gesagt, diese Leistung darf nicht privatisiert werden.“ (BC5)*

During the debates on partial privatization, the alternatives against a partnership with a private operator were mainly defined outside the local government, and were supported by the opposition in the Berlin parliament. Thus, the trade union drew up a

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<sup>157</sup> BZ (Schulte, E.), Komplett-Verkauf der Wasser-Betriebe möglich, 14.01.1999, p.35

<sup>158</sup> Parliamentary document, parliamentary plenary session, 29.04.1999

<sup>159</sup> ZfK, Knappe Kassen zwingen zu neuen Wegen, November 1997, p.4

<sup>160</sup> TAZ (Füller, C.), Schlüsselkampf um Berliner Wasserbetriebe, 14.08.1997, p.2

solution, which was also supported by the Green, the PDS and a faction of the SPD. This alternative aimed to integrate the water business with other Berlin's public companies into a financial holding — waste disposal and public transportation utilities, the port operating company, BEWAG and the Bankgesellschaft<sup>161</sup>. According to the supporters of this model, the creation of a multi-utility would contribute to significantly increasing Berlin's economic potential and contribute to coping with its financial crisis.

*„Die GmbH wäre eine Gesellschaft des Landes Berlin gewesen zu 100% aber eben außerhalb der Verwaltung unter Kontrolle natürlich des Senates und auch sicherlich mit Berichterstattung im Parlament (...). Das war mir immer wichtig, denn es wäre ein unglaubliches Potential gewesen. Wenn man alles mal zusammennimmt, sind es 80 Milliarden Potential und das sind 10,000 Beschäftigte, das sind Milliarden von Umsätzen, die da dort stattfinden.“ (BC9)*

However, this alternative was not selected since the CEO of such a large municipal multi-utility would have concentrated too much power and thus wielded too much influence on the local infrastructure policy. The creation of such an integrated utility would have modified the power relationship between the senate and the utility in favor of the latter.

*„Der politische Hintergrund ist, dass das in der Stadt nicht gewollt war. Es hat verschiedene Anläufe gegeben, das zu machen, aber ich denke zum Schluss und zum Ende, das war vielleicht eine Anekdote. Aber darum würde ich das nicht als Fakt nehmen, aber das ist bestimmt eine nicht unrealistische Einschätzung, dass der Chef der Berliner Stadtwerke wichtiger gewesen wäre, als ein regierender Bürgermeister. Und das ist nicht unbedingt im Sinne der Zielsetzung von Politik.“ (BC6)*

A second alternative, a concession model between BWB and Berlin, was formulated by members of the SPD close to the trade union<sup>162</sup>. According to the proponent of this solution, it would have enabled the senate to recoup Berlin's deficit without privatizing the utility.

*„Es gab ein Konzessionsmodell zwischen BWB und Land Berlin. Man hätte sagen können, wir privatisieren nicht, aber die BWB werden verpflichtet pro Jahr Geld an das Land Berlin abzuführen, und die BWB, sie können das Geld sparen durch Effizienzsteigerung, Kosteneinsparung oder Preiserhöhung.“ (BC9)*

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<sup>161</sup> TAZ (Koch, H.), Verdienen statt verkaufen, 22.11.1996, p.26

<sup>162</sup> TAZ (Koch, H.), Ein teuer Schlag ins Wasser, 14.11.1997, p.23

Several Green members of the parliament advocated this solution, since BWB would remain in public hands<sup>163</sup>. Moreover, this model did not exclude private investors' participation to BWB's subsidiaries outside its core business, such as telecommunications. The fact that the opposition suggested various alternatives, instead of having pursued a common purpose of stopping the privatization process, may have contributed to the weakening of their influence on the decision-making process.

*„Es gab damals Debatten um Alternativmodelle, um den Versuch zu machen, wenigstens nicht zu so einem verheerenden Modell zu kommen. Wir waren allerdings immer ein bisschen hin und her gerissen zwischen einerseits der Ablehnung überhaupt und andererseits der Frage, lässt man sich jetzt auf eine Debatte ein, um Schlimmeres zu verhindern. Das ist natürlich eine schwierige Diskussion.“ (BC3)*

In parallel to the definition of an alternative solution, the trade union exerted pressures on the parliament by organizing demonstrations with the support of all municipal utilities' employees, such as in November 1997 in front of the senate for finance and at the SPD political convention<sup>164</sup>. While they did not impede the privatization, their pressures, after long negotiations with the steering committee, were successful in preserving the utility's public form and securing employees' jobs for the next 15 years following privatization<sup>165</sup>.

*“Und dann hat die heutige Gewerkschaft Verdi, damals ÖTV, gesagt, um Gottes Willen, wenn das passiert, wenn der erste große öffentliche Sektor Berlins richtig privatisiert wird, Wasser — Strom hat man immer ein bisschen anders gesehen. Es gab auch eine Bewag Aktien seit hundert Jahren — Wenn das passiert dann kippt alles um. Es gab in der Kongresshalle hier am Alexanderplatz ein Treffen aller Gewerkschaftsvertrauensleute aus den allergrößten Unternehmen und bei diesem Treffen hat man gesagt, wenn das passiert, gibt es einen Generalstreik im öffentlichen Dienst, so wie es in Frankreich manchmal ist. Und dann ist das Land Berlin weich geworden, hat gesagt, um Gottes Willen, jetzt muss man einen Kompromiss machen, weil den Druck halten wir politisch nicht aus.“ (BC4)*

In addition, the trade union leader Kurt Lange, threatened to use legal means against the senate in order to avoid the privatization. Relying on article 24 of the Berlin

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<sup>163</sup> TAZ (Koch, H.), Ein teurer Schlag ins Wasser, 14.11.1997, p.23

<sup>164</sup> TAZ, Demo gegen Privatisierung der Wasserbetriebe, 15.11.1997, p.26

<sup>165</sup> BZ (Schulte, E.), Wasserbetriebe müssen Kapital nachschießen, 02.03.1999, p.31

Constitutional Act, which forbids the privatization of a local monopoly, he claimed that he would appeal to the court in case of privatization<sup>166</sup>. Due to the pressures of the trade union, reformers had to draw up a complex model, which enabled it to retain the public form while privatizing.

During the first debates on a reform of Berlin's utilities, the opposition had already set itself against BWB's transformation into a joint-stock company<sup>167</sup>. First, it disagreed with the transfer of responsibility from the senate to the utility's management board since water management had to be regulated by the local government. The PDS argued that such a change would lead the senate to lose its influence on BWB, and especially on its price calculation. The Green Party claimed that a corporatization would not be necessary for modernizing the utility and would just enable the parliament to relinquish its duty to manage water. Second, some members of the opposition feared that a corporatization was a first step to a material privatization. In addition, this reform would not increase BWB's competitiveness and result in a significant price increase. During the privatization process, the opposition attempted to participate in the formulation of alternative solutions to selling BWB's shares and also attempted to legitimate these alternatives (concession between Berlin and BWB or integration) during the political debates.

*„Um doch noch zu einer größeren Einnahme für den Landeshaushalt zu kommen, ohne diese komplizierte und mit nicht vertretbaren Risiken verbundene Privatisierungsvariante umzusetzen, bleiben nach wie vor zwei Möglichkeiten: Entweder wird das Stammkapital der Wasserbetriebe von jetzt 3,5 Milliarden DM durch Entnahme von ca. 1,3 Milliarden DM auf die laut Wirtschaftssenator unbedingt notwendige Höhe gesenkt, oder das Land schließt einen entsprechenden langfristigen Konzessionsvertrag mit den Wasserbetrieben ab und bekommt dafür in Anlehnung an das Integrationsmodell bis zu 2 Milliarden DM mit einer einmaligen Zahlung.“ (Kühn (Green), parliamentary document, parliamentary plenary session, 14.01.1999: 4194)*

Hence, the political opposition attempted to demonstrate that BWB's privatization would have several negative consequences at the local level. First they asserted that the privatization would make the utility dependent of an international company<sup>168</sup> and would result in disrupting the local value chain, transferring the management to

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<sup>166</sup> TAZ, ÖTV: Privatwasser gegen Verfassung, 27.09.1997, p.29

<sup>167</sup> Parliamentary document, parliamentary plenary session, 17.09.1992

<sup>168</sup> Liebich (PDS), Parliamentary document, parliamentary plenary session, 01.11.1998, p.3830-3831

another city, and losing municipal control over the utility. Moreover, opponents claimed that privatization would just have short-term benefits but on the long term would neither provide BWB with a consolidation strategy, nor enable the municipality to cope with its budgetary problems. According to a Green deputy, the local population would lose municipal properties and the financial benefit they generated. The privatization would result in the introduction of shareholders, whose interests are essentially profit-driven. This would in turn generate conflict with the principle of *Daseinsvorsorge* and its public duty. The environmental goals would be neglected at the expense of economic principles, which may have negative impacts on water services for future generations<sup>169</sup>. Their argument was based not only on ideology, e.g. privatization threatens the public task of the municipality, or water is a public good and should not be privatized. They also attempted to convince the parliament by arguing that the private sector would not respect the environmental standards, by showing that a privatization would infringe the legal principles regulating the water sector in Berlin (for instance, the cost-recovery principle, or the democratic principle)<sup>170</sup>. In order to convince the members of the parliament, they also relied on international comparisons — such as with the water sector in France and England — and on national comparisons, like with the privatization of the Rostock water utility<sup>171</sup>.

The opposition also tried to stop the privatization process, notably through legal means. For that purpose, they exploited several conflicts of interest that occurred during the bid. For instance, a Green party faction demanded to stop the privatization because of a conflict of interest between Enron's subsidiary Azurix, one of the bidders, and Merrill Lynch, the enterprise in charge of organizing the bid<sup>172</sup>. Short before the completion of the bid on June 18, 1999, the opposition took the senate to the Berlin constitutional court in order to prove the privatization law's unconstitutionality<sup>173</sup>. While the Berlin constitutional court accepted the privatization law on the whole, it cast doubts on way of calculating the interest rate generated by the partners and its consequence for Berlin's water prices. It decided to monitor the

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<sup>169</sup> Berger (Green), Parliamentary document, parliamentary plenary session, 01.11.1998, p.3835

<sup>170</sup> Wolf (PDS), Parliamentary document, parliamentary plenary session, 01.11.1998, p.3829

<sup>171</sup> Perwerstorff (PDS), Parliamentary document, parliamentary plenary session, 13.11.1997, p.2688

<sup>172</sup> BZ (Schulte, E.), ÖTV fordert Ablösung von Merrill Lynch, 19.03.1999, p.33

<sup>173</sup> TAZ (Koch, H.), Die Schlacht ums Wasser, 10.06.1999, p.19

legal status of the contacts and postponed its decision to October 1999<sup>174</sup>. Arguing that this delay was costing the city, the senate for finance did not agree to wait until the end of October in order to conclude the transaction. As a reaction, the opposition threatened to sue the senate if they did not respect the court's terms<sup>175</sup>. Eventually, the senate and the investors agreed on postponing the signature of the contract after the decision of the constitutional court. On October 21, 1999, the court finally concluded that two clauses of the privatization law were unconstitutional. First, the interest rate granted to the shareholders (R+2%)<sup>176</sup> was defined as too high and the court demanded to erase the +2%. Without compensation, the investor refused to pay the initially set amount of €1.68 billion<sup>177</sup>. The court also criticized the efficiency clause and the democratic control defined in the contract. The efficiency clause had to be erased since BWB should be efficient in any case<sup>178</sup>. In addition, the court found that the contract would potentially cause a breach in the legitimacy chain (*Legitimationskette*)<sup>179</sup> (BC8), since the public authorities — represented here by the state secretaries — would not be able to influence the choice of the BWB management board.

While the opposition expected that the court's decision would postpone the privatization once again because of new bargaining between the senate and the private investors, the partners signed the contract directly the same day<sup>180</sup>. Following changes in the privatization law for securing the transfer of the €1.68 billion to Berlin (including €102.2 million for BWB's subsidiary SVZ), the senate started negotiating with the private investor on compensation alternatives. Vivendi pushed the senate to conduct new negotiations before the money transfer and sought to reduce the sale price<sup>181</sup>. The opposition led by Harald Wolf, PDS member of the parliament, threatened to contest this change legally, but the new motion of the

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<sup>174</sup> BZ (Schulte, E.), Wasserbetriebe: Senat hält an Teilverkauf fest, 09.09.1999, p. 31

<sup>175</sup> BZ (Schulte, E.), Opposition beantragt Verbotserfügung, 10.09.1999, p.35

<sup>176</sup> R is based on the 10 years average of the interest rate of the government bond during the 20 years period preceding the calculation of R.

<sup>177</sup> BZ (Schulte, E.), Wasserbetriebe : Vivendi besteht auf Ausgleichgarantie des Landes, 29.10.1999, p. 32

<sup>178</sup> TAZ (Rother, R.), Kalte Dusche für den Senat, 22.10.1999, p.17

<sup>179</sup> The citizens elect the parliament; parliament nominates senators; senators choose state secretaries; state secretaries are members of the supervisory board; the supervisory board nominates the management board of the utility.

<sup>180</sup> BZ (Richter, C.), Teilprivatisierung der Wasserbetriebe vollzogen, 30.10.1999, p.37

<sup>181</sup> BZ (Schulte, E.), Wasserbetriebe : Vivendi besteht auf Ausgleichgarantie des Landes, 29.10.1999, p. 32



opposition was rejected<sup>182</sup>. In order to comply with the decision made by the Berlin constitutional court, the senate had to change the law concerning the rate of return and the double majority within the decision committee (*Weisungsausschuss*). In prevision of this situation, the senate introduced a new clause in the contract (§ 23.7), which made the recalculation of water prices possible through a contract change. This clause secured the return on interests expected by the private consortium, namely R+2%. It allowed the partners to rely on a disproportional repartition of the benefits between Berlin and the private partner, if the expected revenues of the private partners were not met. In this case, Berlin would relinquish a part of its dividend. It also guaranteed that if the disproportional repartition was not enough, Berlin would pay the difference as a compensation for the private partners. On January 6, 2000, a change in the privatization contracts occurred to meet the constitutional court's request. The principle of double majority in the decision committee (*Weisungsausschuss*) was modified and each strategic decision had to be validated by the majority of its members (five members) but with at least members of Land Berlin. While the opposition did not succeed in impeding BWB partial privatization, they largely contributed to making the adoption of the privatization difficult. The opposition also criticized the exclusion of environmental associations from the decision-making process.

*“Ich will nur kurz erwähnen, aber nicht länger darauf eingehen, dass es allein vom Verfahren her notwendig gewesen wäre, nach dem Naturschutzgesetz auch die Naturschutzverbände zu beteiligen, da es sich auch um Änderungen des Berliner Wassergesetzes handelt.” (Wolf (PDS), parliamentary document, parliamentary plenary session, 14.01.1999: 4191)*

The relationships between local decision-makers and private operators: In Berlin, a great number of external actors have influenced the decision-making process directly or indirectly. During the first half of the 1990s, utility managers and local politicians had already debated the activity of private operators in the Berlin region. The local decision-makers perceived these increasing competitive pressures as a real threat to Berlin's municipal utilities.

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<sup>182</sup> BZ (Schulte, E.), BWB: Senat will Gesetz ändern, 23.10.1999, p.38

*“Through the political changes, the situation in Berlin and its region also has fundamentally changed. This cannot and will not be without consequences on our enterprise. (...). In the region but also in Berlin, private enterprises are active. These companies are called: Gelsenwasser, Générale des Eaux, Lyonnaise des Eaux Dumez, Preussenelektra, Ruhrgas and Gas de France. That means economic power and corporate autonomy are at the border of our enterprise.” (BWB, annual report, 1992: 13)*

The growing activity of private companies around Berlin represented one of the grand coalition's central arguments for implementing a corporatization of Berlin's municipal utilities. According to members of the parliament, there were two reasons for taking this competitive threat seriously. First, Berlin and its utility were incapable of dealing with the huge investments without increasing the water prices. Second, the private operators might provide the population with the same or a similar service and for a better price. This would eventually result in a reduction of BWB's activities in Berlin and have negative consequences on Berlin's budget.

*“Wenn wir diese Entwicklung nicht im Blick haben, wird es in kürzester Zeit so sein, daß diese Unternehmen auf den Berliner Markt kommen und die Eigenbetriebe unter Druck setzen, weil sie nämlich die gleichen Dienstleistungen erheblich preiswerter anbieten als unsere Eigenbetriebe.” (Landowsky (CDU), parliamentary document, parliamentary plenary session, 17.09.1992: 2831)*

*“Weil der Druck auf eine vernünftige moderne Ver- und Entsorgung dieses Gemeinwesens größer werden wird, werden wir, falls das Land Berlin wegen der schlechten Haushaltslage die Eigenbetriebe nicht in die Lage versetzt, diese Investitionen zu tätigen, den Privaten mehr und mehr - auch wegen des Drucks aus der Bevölkerung - das Feld überlassen.” (Staffelt (SPD), parliamentary document, parliamentary plenary session, 17.09.1992: 2828)*

Berlin decision-makers started interacting with private operators before officially announcing the call for tenders for BWB's privatization. Informal interactions took place mostly during events, such as conferences or professional fairs. CGE had thus already established a partnership with BWB through international joint projects — as in Budapest for instance — through which they had obtained a first contact with Berlin decision-makers and could create a good working relationship with BWB's CEO<sup>183</sup>. LdE started lobbying local decision-makers in the middle of the 1990s and tried to influence them to enter a long-term cooperation.

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<sup>183</sup> BZ (Schulte, E.), Krupp-Thyssen, RWE, Veba und Bewag in der engeren Wahl, 21.01.1999, p.39

Already before BWB's partial privatization was officially voted, Eurawasser managers went public with their interest in a partnership with BWB<sup>184</sup>. They claimed that they could help the municipality to deal with its deficit and its high water prices. During a working breakfast in May 1998, Thyssen-Krupp's CEO discussed an Eurawasser offer with Berlin's Mayor Diepgen<sup>185</sup>. They also hired former politicians in order to lobby on the local decision-makers. After several months of informal discussions with Eurawasser, the senator for finance suggested the creation of a "concession model". Private companies' concepts of partnership were generally formulated to meet local decision-makers' needs: solving municipal financial problems, creating synergies through economies of scale, improving BWB's international competitive potential. In conducting an international call for tender, Berlin's senate for economic affairs could expand the number of competitors for the partial privatization of BWB. After the steering committee had made a selection among 17 candidates for BWB's takeover, only 6 candidates with enough financial resources and a compatible business model remained: A consortium made up of RWE-Vivendi and Allianz, Eurawasser, Saur, PREAG and Bewag, Enron with its subsidiary Azurix, and Severn Trent<sup>186</sup>. Each competitor had a specific strategy, competitive advantages but also shortcomings (see Table 14).

In this period, Preussen Elektra, a VEBA subsidiary, aimed to expand its activity in the national and international water sector<sup>187</sup>. In the course of this expansion the Berlin bid represented a crucial business move. Its participation in Gelsenwasser made VEBA one of the largest water operators active in Germany. For the BWB bid, PREAG could rely on its shareholding in Bewag and argue that taking over BWB would make it an essential actor in the Berlin's urban services. According to PREAG, its involvement in Berlin's public services would result in increasing the synergies between the various businesses at the local level and be financially advantageous for the municipality. At the same time PREAG aimed to compete for the takeover of the Berlin Real Estate Fund Company<sup>188</sup>. Through this strategy, it expected to further confirm its commitment in Berlin. However, this actor was put

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<sup>184</sup> BZ (Schulte, E.), Finanzverwaltung will erneut in die Kasse der Berliner Wasserbetriebe greifen, 26.02.1998, p. 30

<sup>185</sup> BZ (Schulte, E.), Krupp/Thyssen interessiert an Wasserbetrieben, 23.05.1998, p. 25

<sup>186</sup> TAZ (Koch, H.), Denn sie wissen nicht, was sie verhandeln, 05.03.1999, p.22

<sup>187</sup> BZ (Schulte, E.), Von Berlin Wasser zum Preussewasser, 09.07.1998, p.28

<sup>188</sup> BZ (Schulte, E.), Krupp-Thyssen, RWE, Veba und Bewag in der engeren Wahl, 21.01.1999, p.39

off and left unconvinced by the legal complexity of the holding model and feared an increase in water prices following the privatization of the sanitation's services<sup>189</sup>. Finally, its proposition to only take over the part of BWB in charge of the competitive activity (*Wettbewerbgeschäft*) for €1.18 billion did not meet the steering committee's expectations<sup>190</sup>. Another candidate for the bid was Severn Trent<sup>191</sup>. The British water operator justified its participation through its experience in the English water privatization (Birmingham and Nottingham). However, its chances to win were severely impeded by a lack of a competent partner to build a consortium, and because its offer was too low (€0.87 billion)<sup>192</sup>.

For Enron's subsidiary Azurix, BWB's takeover would have been an opportunity first and foremost to gain a foothold in the European market, and second to reinforce its strategy of becoming an international company in the water sector that had started in 1998 with the take over of Wessex Water (Defeuilley, 2001: 81). The competitive advantage of the operator was its financial power associated with its absence of expertise in the water sector. To put it another way, it would have provided the municipality with a large investment without interfering in Berlin's water policy as it was not its core business. In March 1999 though, Enron was discredited by a conflict of interest involving Merrill Lynch<sup>193</sup>. In early 1999, the investment bank was hired by Enron to conduct the transformation of Azurix, the water subsidiary of Enron, into a joint-stock company. Enron did not inform the municipality of Berlin of this business. This project was expected to reinforce their position in the water sector, and any potential role in BWB's partial privatization, was expected to fulfill a similar function. However, Merrill Lynch was not authorized to work on a similar project that would potentially influence the neutrality of its judgment for the choice of the private partner for BWB, since a takeover of BWB's shares by Enron would increase Merrill Lynch's benefits generated by Azurix's public listing. Consequently, Enron's probability of winning the contract was close to none since Merrill Lynch's position toward this company was no longer

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<sup>189</sup> BZ (Schulte, E.), Wasserbetriebe: Thyssen-Krupp steigt aus, 10.03.1999, p.33

<sup>190</sup> BZ (Schulte, E.), Wasserbetriebe: Höchstes Gebot kam von Suez, 13.03.1999, p.34

<sup>191</sup> BZ (Schulte, E.), Britens planen neue Bieterkonsortium für BWB, 04.02.1999, p.35

<sup>192</sup> BZ (Schulte, E.), Wasserbetriebe: Konsortien mit guten Chancen, 13.02.1999, p.35

<sup>193</sup> BZ (Schulte, E.), ÖTV fordert Ablösung von Merrill Lynch, 19.03.1999, p.33

considered neutral. Moreover, the other companies threatened to engage in a legal battle with the Berlin senate if Enron won the bid<sup>194</sup>.

Eurawasser was probably the competitor with the highest probability of winning the bid. The operator was the finance senator's favorite candidate. Before the bid, it had already made several concrete propositions to local decision-makers<sup>195</sup>. The French-German consortium could demonstrate its experience in the German water sector through other cooperations in cities such as Rostock or Potsdam. It justified its regional commitment by competing to take over the Berliner Real Estate Fund. However, Eurawasser did not win the bid, despite all these efforts. In the early phase of the bid, the press claimed that Eurawasser made a higher offer than necessary for the Berlin Real Estate management in exchange for the acceptance of the BWB bid<sup>196</sup>. It also made public that the operator obtained the memorandum on BWB before all other competitors<sup>197</sup>. According to a BWB representative, such stories relayed by the press made the Eurawasser's candidature bound to fail (BC4).

*„Also damals war das der Berliner Journalist Ebert Schulte, der hatte dieses Papier geschrieben, hat einen riesigen Artikel, und damit waren die tot. Die hätten von mir aus noch eine halbe Milliarde mehr zahlen können, die waren einfach tot. Sie haben sie auch nicht gekriegt.“ (BC4)*

In addition, Thyssen-Krupp gave up the competition in March 1999 and consequently abandoned the consortium co-founded with LdE and the Bankgesellschaft<sup>198</sup>. First, the German company was not confident about the privatization model chosen by Berlin's decision-makers. Second, the water management was not its core business. Thyssen-Krupp's strategic turn forced the French operator to recalculate the entire bid and to look for new partnerships. Despite several discussions with VEBA, about a cooperation with its subsidiary Preussenelektra, and Mannesmann, Lyonnaise des Eaux and Bankgesellschaft competed without a third partner<sup>199</sup>.

Eventually, the consortium made up of Vivendi, RWE and Allianz won the bid. During a special meeting on June 18, 1999, the steering committee decided to

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<sup>194</sup> BZ (Schulte, E.), Der Milliarden schwere Poker um die Wasserbetriebe, 31.05.1999, p.37

<sup>195</sup> BZ (Richter, C.), Lyonnaise des Eaux verstärkt Engagement, 22.04.1998, p.33

<sup>196</sup> BZ (Schulte, E.), Köppelgeschäft mit den Berliner Wasserbetrieben?, 22.10.1998, p.35

<sup>197</sup> BZ (Schulte, E.), Vertrauliches Bank-Konzept bei Eurawasser, 18.12.1998, p.35

<sup>198</sup> BZ (Schulte, E.), Thyssen-Krupp steigt aus, 10.03.1999, p.33

<sup>199</sup> BZ (Schulte, E.), Suez gewinnt Mannesmann für Berlinkomm Offerte, 29.03.1999, p.34

sell 49.9% of BWB's shares to the consortium for €1.68 billion. As LdE did with Thyssen, Vivendi sought a German strategic partner to prepare the bid. Discussions initially started with PREAG who had already owned the subsidiary OEWA together with Vivendi. However, the consortium was finally built with RWE. During this period, the German energy provider aimed to expand its activity on the water market. This consortium had several advantages. Firstly, their cooperation with BWB in various cities, such as Budapest, enabled the consortium to obtain the support of BWB's management board. Moreover, RWE and Vivendi could invest in further regional enterprises through their diversified businesses. For instance, synergies could be detected in the telecommunication sector between RWE's subsidiary Otelo, Vivendi's telecommunication business, and BerliKomm<sup>200</sup>. Through its international experience, Vivendi could help BWB to build up and reinforce its international expansion course in the water sector. Vivendi and RWE also relied on a great number of consultants<sup>201</sup>. During the privatization process, for instance, RWE hired a consulting group (WIB Ingenieurgesellschaft), which it charged with lobbying the SPD and the trade union ÖTV. The holding model was partly elaborated by lawyers from consulting groups close to Vivendi (Klaus Finkelburg) and RWE.

The winner of the bid had to respect these constraining criteria<sup>202</sup>: No increase in water prices for the next 4 years and no lay-offs for the next 15 years following partial privatization. It had to award most of the contracts to local enterprises and contribute to BWB's development as a competitive actor at the national and international level. It had to create an international research center and had to invest €102.2 million SVZ, which was BWB's most important source of deficit.

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<sup>200</sup> BZ (Schulte, E.), Wasserbetriebe müssen Kapital nachschien, 02.03.1999, p.31

<sup>201</sup> BZ (Schulte, E.), Die Milliarden schwere poker um die Wasserbetriebe, 31.05.1999, p.37

<sup>202</sup> Berlin Senate, Press release, Teilprivatisierung Wasserbetriebe: Senat gibt Zuschlag an RWE/Vivendi, 18.06.1999

Potential partner	Strategy	Competitive advantages	Weaknesses
Preussen Elektra AG	<ul style="list-style-type: none"> <li>• Reinforcement of German water business (Preussenwasser AG)</li> <li>• Expansion of an international business</li> </ul>	<ul style="list-style-type: none"> <li>• Participation in the BEWAG</li> <li>• Competition for the bid for the Real Estate Berlin</li> <li>• Expertise of the German water sector through Gelsenwasser</li> </ul>	<ul style="list-style-type: none"> <li>• Not convinced by the BWB Holding model</li> <li>• Aim to take over just the BWB competitive business</li> <li>• Offer too low</li> </ul>
Severn Trent	<ul style="list-style-type: none"> <li>• Reinforcement of its international business</li> </ul>	<ul style="list-style-type: none"> <li>• Privatization expertise on the English water sector</li> </ul>	<ul style="list-style-type: none"> <li>• Incompatibility in the international strategy of BWB and Severn Trent</li> <li>• No consortia partner</li> <li>• Offer too low</li> </ul>
Enron (Azurix)	<ul style="list-style-type: none"> <li>• Development of a business in Europe</li> <li>• Becoming an international player in the water sector</li> </ul>	<ul style="list-style-type: none"> <li>• Financial power</li> <li>• No expertise in the water sector</li> </ul>	<ul style="list-style-type: none"> <li>• Conflict of interests with Merrill Lynch</li> </ul>
Lyonnaise des Eaux Thyssen-Krupps Bankgesellschaft	<ul style="list-style-type: none"> <li>• Reinforcement of its German business</li> </ul>	<ul style="list-style-type: none"> <li>• Expertise in the German and international water sector</li> <li>• Relationships with Senate for finance</li> <li>• Competition for the bid for the Real Estate Berlin</li> </ul>	<ul style="list-style-type: none"> <li>• Problems with the Memorandum and the bid for Berlin Real Estate</li> <li>• Exit of Krupps-Thyssen from the bid</li> </ul>
Vivendi RWE Allianz	<ul style="list-style-type: none"> <li>• Reinforcement of German Business for Vivendi</li> <li>• Development of the water business for RWE</li> </ul>	<ul style="list-style-type: none"> <li>• Expertise in the German and international water sector</li> <li>• Relationships with BWB at the international level</li> <li>• Synergies in public transportation and telecommunication businesses</li> </ul>	

**Table 14: Strengths and weaknesses of the private companies competing for the BWB bid according to the steering committee (own representation derived from local documents)**

*Systems effects following the reform of water services*

Cooperating with a private partner through an international call for tender enabled the municipality to cope with its financial deficit from 1998 and to consolidate the utility without increasing water prices and resorting to lay-offs. In the long term however, this reform confirmed the contradiction between the original purpose of the utility, the mission of public service, and its goal of generating

financial profit for its shareholders and becoming a competitive actor on the water market. This reform was also strongly criticized and led to the emergence of conflicts between stakeholders inside and outside the utility. Eventually, while Berlin's local decision-makers never integrated the water services with other urban services, the critical evaluation of the privatization made several actors debate about remunicipalizing water services and founding a *Stadtwerk*.

Contradictory goals: Tensions between the goal of public services and the goal of profit making already emerged during the 1990s. It started after Reunification through the cooperation with municipalities in the region of Brandenburg, in Eastern Germany and Eastern Europe. The goal of the board of directors in the middle of the 1990s was to transform the utility into an enterprise active on the international water market. The transformation into a public corporation made this development easier.

*“With the transformation of the BWB into a public corporation, the utility has the possibility — beyond the city partnership as municipally owned company — to become active on the international water market. The particular position and strength of the BWB for the international business rely on the management and technical services both in the water supply and waste water treatment that can be commercialized. The link between management and operating control offers further advantages in comparison to the other competitors. Lastly BWB have its particular strength because of the experience of the economic, technical and social reorganization of the East German water management and its position as municipal enterprise.”* (BWB, annual report, 1996: 20)

During the middle of the 1990s, BWB had already started to develop businesses in new sectors and outside Berlin. Its diversification strategies encompassed the acquisition of the company SVZ *Schwarze Pumpe*<sup>203</sup> for €163.6 million in 1995<sup>204</sup>. In 1997, BWB also founded BerliKomm, a subsidiary specialized in the telecommunication business. In parallel, the utility secured its position on the water market outside its local area. At the regional level, the utility increased its cooperation with municipalities and even participated in the bid organized by the city of Potsdam in 1998. At the international level, BWB also followed an expansion course. In addition to the commercialization of its techniques and technologies, and

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<sup>203</sup> By taking over this enterprise, BWB planned to develop a technical process that would transform the sludge from sewage works into methanol.

<sup>204</sup> BWB, annual report, 1995, p.18



the development of consulting businesses, the utility set investment businesses in several cities world wide (such as in Budapest or Xian (China)) and also cooperated with international operators (Severn Trent and CGE). During this period, the utility was considered to be running well<sup>205</sup>. BWB's partial privatization was expected to reinforce its international activity.

*“Die Muttergesellschaften und die Investoren warden sich insbesondere nach besten Kräften bemühen, die BWB-Gruppe beim Eintritt in örtliche Märkte, auf denen die BWB-Gruppe bislang nicht tätig gewesen ist, soweit wie möglich zu unterstützen und ihr den Zugang zu diesen Märkten zu erleichtern. Die Muttergesellschaften und die Investoren werden die ihnen verfügbaren Möglichkeiten ausschöpfen, die BWB-Gruppe an den von ihnen unterhaltenen nationalen und internationalen Partnerschaften, Allianzen und ähnlichen Verbindungen zu beteiligen.” (BWB’s partial privatization contracts, 1999: 14)*

In contrast to a great number of municipalities, state regulation — especially the locality principle (*Örtlichkeitsprinzip*) enforced by the Municipal Code (*Gemeindeordnung*) — did not impede the expansion of BWB’s activities at the national and international level, or in other sectors. Although this activity was supported by a great number of actors, several stakeholders condemned this strategy in the name of the *Daseinsvorsorge* and the public duty. In 1996, SPD members already questioned BWB's activity in parliament<sup>206</sup>. From the perspective of the senate for economic affairs, this strategy was necessary to improve the local water distribution and decrease water prices. However, while BWB’s core activity of managing water services for Berlin’s population was making profits, the investment in other “competitive” businesses contributed to the utility's overall deficit. In 1998 for instance, BWB generated a profit of €33 million, whereas SVZ made a deficit of €50 million<sup>207</sup>. This situation was correlated with a reduction of investment in Berlin’s infrastructure, and resulted in a large amount of criticism. For instance, a Green parliamentary party member accused the BWB board of directors and the senate of having neglected their public duty by taking part in a business in deficit without having previously assessed the risks<sup>208</sup>. In addition, BWB's investment

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<sup>205</sup> BZ, Wasser-Betriebe vor Verkauf?, 17.05.1997, p.1

<sup>206</sup> SPD, parliamentary document, political demands, 14.11.1996

<sup>207</sup> BWB, annual report, 1998, p.11

<sup>208</sup> BZ (Schulte, E. & Dülfer, M.), Vorstand der Wasserbetriebe gerät wegen Controllingfehler in die Kritik, 20.11.1998, p.31

strategy at the international level was criticized for being too risky and cost-intensive. For several stakeholders on the one hand, the utility's main task was to manage the local water services and not to be active at the international level. On the other hand, this situation reinforced the idea that a strong partner would be needed to support the utility's diversification and internationalization strategies. While this expansion was expected to be pursued after the partial privatization, a great number of subsidiaries were sold<sup>209</sup> and the multi-utility department was closed. In addition, BWB's international activity was restricted to “non-investment fields of Consulting, Management contracts/operations management and Cooperation with investors<sup>210</sup>”. However, the goal of profit-making remained dominant, especially through the yearly growing interest rates (Table 15) and through the disproportional repartition of benefits among shareholders.

Year	1996	2004	2005	2006	2007	2008
Interest rate (%)	4	6	6,5	6,9	7,3	7,77

**Table 15 : Evolution of the interest rate over time**  
(Source: Huesker, 2011: 258)

Hence, through several increases in water prices, the utility could consolidate its profit and pay an important amount to its shareholders. For several actors, making profits at the expense of citizens was contrary to the prime goal of the utility.

*„Also das Land Berlin wollte dieselben Gewinnzuschläge und die Verzinsung haben, wie die Privaten, um seinen Haushalt zu sanieren. Die haben also ein ganz bestimmtes Weltbild von dem Thema Wasserversorgung gehabt. Ein ganz erschreckendes Weltbild im Übrigen, das hatte mit Daseinsvorsorge nichts mehr zu tun.“ (PA3)*

Conflict escalation: Following privatization, prices were frozen for 4 years and between 1997 and 2003 water prices remained stable while the activity resulting from water distribution and sanitation decreased. Following the end of the price cap fixed by the privatization contract, prices increased yearly resulting in heated political debates. In 2003, the Berlin senate conducted two modifications of the privatization contracts. The first change resulted in replacing the interest rate  $R+2\%$

<sup>209</sup> For instance, BWB sold Avidia in 2001, UCB Managementberatung GmbH, and SVZ schwarze Pumpe in 2002, WTE Wassertechnik in 2003, Sydio.it solutions and Berlikomm in 2004.

<sup>210</sup> BWB, annual report, 2007, p.27

by an interest rate defined by the senate yearly. The second modification replaced the way of calculating the asset depreciation in order to take the inflation rate into account.

To several stakeholders, price increases were caused by these modifications in the contractual arrangements made between the senate and the private partners. This price policy was criticized at the Berlin parliament<sup>211</sup> and consumer associations started exerting pressures on the senate to publish the price calculations (BC2). By contrast, other actors argued that price increases were caused by other factors than the privatization contract. Private operators justified this price increase as being due to the fact that prices had been frozen during seven years<sup>212</sup>. The senator for economic affairs, nominated in 2002, argued that the interest rate defined by the senate for 2004 was lower than the average interest rate<sup>213</sup>. BWB managers claimed then that price increase was caused by the decrease in water consumption associated to the high investment<sup>214</sup>.

Eventually, a citizens' initiative, called Berliner Wassertisch (Berlin Water Roundtable), was founded in 2006 with the purpose of making the privatization contract public. This association was made up of citizens, Attac members, members of the Green and Left parties, and environmental associations (BC1). For them, making the privatization contracts public was a first step necessary to demonstrate their unconstitutionality. Following that the citizens' association planned to legally challenge the constitutionality of the privatization contract.

*“Und der erste Schritt ist die Veröffentlichung der Konsortialverträge, wo die Bedingungen der Kooperation festgeschrieben sind. Wir gehen davon aus, dass möglicherweise diese Verträge so abgefasst sind, dass man dagegen klagen könnte, weil sie sittenwidrig sind, aber dazu müssten die Verträge alle zugänglich sein.” (BC1)*

The association, that officially started its action in the middle of 2007, had six months to collect 20,000 signatures in order to make the local referendum possible (*Bürgerentscheid*). On the January 31, 2008 deadline the association had gathered

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<sup>211</sup> BZ (Neumann, P.), Das Duschen wird teurer, 07.10.2005

<sup>212</sup> <http://www.veoliawasser.de/content/fragen-und-antworten> (accessed 04.11.2013)

<sup>213</sup> Wolf (PDS), parliamentary document, 30th session of the commission on legal affairs, 08.12.2003, p.10

<sup>214</sup> BZ (Schulte, E.), Wasser könnte erneut teurer werden, 10.05.2006

around 40,000 signatures<sup>215</sup>. However, the senate attempted to hinder this initiative and rejected the motion on March 4, 2008<sup>216</sup>. Following this decision, the initiative brought the problem to Berlin's administrative court on April 18, 2004. On October 6, 2009, the court accepted the citizens' initiative's complaint, although the senate did not recognize the legal legitimacy of the initiative<sup>217</sup>. The Berlin constitutional court's decision led to the second step of the citizens' initiative: the collection of 173,000 signatures in order to organize a local referendum. This stage started on June 28, 2010 and, according to the legislation, had to be completed by October 27, 2010. By this date, over 265,000 signatures had been collected, which resulted in the organization of the local referendum concerning the publication of all documents linked to the partial privatization<sup>218</sup>. The date of the vote was fixed by the senate on February 13, 2011. On October 30, 2010 however, the TAZ newspaper published extracts from the privatization contracts<sup>219</sup>. Despite its success, the initiative did not find the expected support inside the local government. The local government decided to modify the law on liberty of information in order to publish the privatization contracts and make the initiative superfluous<sup>220</sup>. Before the Berlin parliament's election in 2002, the PDS had been in the opposition with the Greens and had struggled against BWB's privatization. Following the election, it became a part of the ruling coalition and the new PDS senator for economic affairs, Harald Wolf, who was one of the main privatization opponents, became head of BWB's supervisory board. In this new situation, members of the Linke had to pursue the cooperation with private partners and claimed that returning BWB to public hands was not possible. This party was also attacked by several stakeholders for blocking actions against the BWB privatization contract. For instance, the head of die Linke forbade its members from supporting the citizens' initiative against the privatization contracts (BC1). During the citizen votes organized on February 13, 2011, Harald Wolf claimed that he would not vote in the local referendum, since the local government had voted a law that made all the information about the privatization public (*Berliner*

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<sup>215</sup> TAZ, Geheime Informationen sollen fließen, 02.02.2008

<sup>216</sup> Tagesspiegel, Senat stoppt Wasser-Volksbegehren, 05.03.2008

<sup>217</sup> Berliner Morgenpost, Berliner Wasser-volksbegehren ist zulässig, 06.10.2009

<sup>218</sup> Tagesspiegel, Senat wird Volksentscheid nicht bekämpfen, 28.10.2010

<sup>219</sup> Berliner Morgenpost, Umstrittene Wasserverträge stehen im Internet, 30.10.2010

<sup>220</sup> BZ (Ritzenhoff, C.), Offenlegung der Geheimverträge, 04.06.2010

*Informationsfreiheitsgesetz*)<sup>221</sup>. However, this law was criticized for not enabling the publication of all information on the BWB privatization. Heidi Kosche — a Green member of the Berlin parliament — had been attempting to look at the privatization contracts since 2007 but was impeded by the senate administration. In 2012, as she had just obtained 15 out of the 119 folders, she appealed to the constitutional court for permission to look at all the contracts<sup>222</sup>.

During this period, conflicts between the private partners and the municipal authorities also emerged. The main sources of conflict were also the water price calculation and the dividends generated by the shareholders, as well as their disproportional repartition. Usually, the senator for finance shared the private partners' interests, namely increasing BWB's profits. The senator for economic affairs was in favor of a price cut, which would imply a reduction in BWB's profits margin. The private partners were able to use this situation for their own interest and supported the finance senator in order to keep BWB's profits as high as possible.

*“Die Privaten haben jeweils einen Vertreter und Berlin hat zwei Vertreter in den Gesellschafter-Gesprächen und zwar den Finanzsenator und Herrn Wolf, den Wirtschaftssenator. Und der Finanzsenator hat natürlich ein ähnliches Interesse wie die privaten Investoren, der will die Zuführung zum Landeshaushalt. (...). Und immer wenn Wolf wieder sagt, wir müssen hier was machen, dann sind sie immer zum Finanzsenator gerannt und der hat dann gesagt, nein, ich stimme nicht zu (...). Und das ist den Privaten bisher sehr geschickt gelungen, dass in Berlin so auch gegeneinander zu spielen, das ist natürlich eine sehr ungünstige Situation, weil das Land Berlin lange Zeit nicht mit einer Stimme gesprochen hat.“ (BC10)*

These debates about the financial returns and the price calculation — which were associated with the pressures of the citizens' initiative — have brought a great deal of uncertainty in the relationship between the partners. In this context of crisis, the senator of finance and the senator for economic affairs started sharing the same interests, namely reducing the profit in order to maintain stable prices. In order to make the water prices in Berlin decrease, the senator for economic affairs requested the cartel authorities to control Berlin water prices<sup>223</sup>. After the control, the cartel authority requested the utility to drop its prices by 19% which would represent a

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<sup>221</sup> Berliner Morgenpost, Wirtschaftssenator geht nicht zum Volksentscheid, 10.02.2011

<sup>222</sup> TAZ (Heiser, S.), Heidi Kosche wills wissen, 06.10.2010

<sup>223</sup> Tagesspiegel (Kneist, S.), Bundeskartellamt prüft Berliner Wasserpreise, 18.03.2010

decrease of around €205 million of its sale revenue<sup>224</sup>. While Veolia, in line with the senate, would probably accept to reduce their profit margins in order to cut water prices, RWE would not agree since it would reduce its profits in case it would sell its shares of BWB<sup>225</sup>. As Veolia was interested in buying back RWE's shares, RWE could exert pressures on the French enterprise. The cooperation between BWB's shareholders has therefore become more complicated and the private investors have lost their dominant position. The dominant coalition has changed, and with the balance of power shifting towards the senate.

*„Geplatzt ist diese Konstellation mit dieser Klage und die €340 Millionen, die sie zusätzlich haben wollen. Da ist sozusagen der Bogen überspannt, und auch der Finanzsenator hat gesagt, na ja ihr habt aber einen Knall. So, und dann plötzlich sprach man mit einer Stimme und jetzt trifft das umgekehrte Phänomen ein. Da sagt RWE, nein er zieht die Klage durch, weil das ist ein Finanzinvestment (...), während Veolia natürlich neben dem Gewinn, den es auch natürlich gerne nimmt, auch unternehmerische Interessen hat und sagt, wir gehen alle den Bach runter. Und jetzt stehen sie also plötzlich gegeneinander.“ (BC10)*

Toward a remunicipalization of urban services?: Due to the specific context of the late 1990s, Berlin's local decision-makers chose a solution in line with the European Commission's strategy, that aimed to fight against cross-subsidies and to enforce international calls for tender in all public services delivery. Involving private partners was regarded by a great number of local decision-makers as a way to prepare for the introduction of competition in this sector. In this context, Berlin local decision-makers conducted a partial privatization and created a complex cooperation model. In balancing the public and private interests, the Berlin model of water management was therefore expected to constitute a model for future privatization in the German water sector (Wolfers, 2004).

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<sup>224</sup> Berliner Morgenpost (Schomaker, G.), Wasser-Entscheidung könnte Senat viel Geld kosten, 06.12.2011

<sup>225</sup> BZ (Thomsen, J.), Das Feilschen ums Wasser beginnt, 24.11.2011

*„Für Berlin treibende Kraft war auf der einen Seite die Schulden des Landes Berlin, auf der anderen Seite denke ich auch eine ideologischen Ausrichtung. Dass man besser bestimmte Dienstleistungen privatisiert, das war Mitte der 90er Jahre eine weit verbreitete Auffassung auch unter den Sozialdemokraten und den Christdemokraten, also bei allen die so ein bisschen in diese Liberalisierungsrichtung hineingingen. Immer nach dem Motto, der Private ist halt besser als der öffentliche, der arbeitet effizienter.“ (PA2)*

However, the legal complexity of the model limited its diffusion and no other municipality has adopted a similar arrangement. Moreover, the ideological context has changed since the end of the 1990s and the idea that water-sector privatization was a solution for solving water-management problems decreased in popularity among local decision-makers. Due to local elections of the fall 2011, the remunicipalization of Berlin utilities became a central political issue. Alternative solutions to BWB privatization were discussed. In this context, many local politicians debated the necessity of returning the water utility back into public hands and the ways of financing such a remunicipalization. The SPD's leader, Michael Müller, suggested the creation of citizens' shares in order to finance a takeover of BWB<sup>226</sup>. The head of *Die Linke* and brother of the senator for economic affairs, Udo Wolf, did not rule out buying back the utility.

*“An diesem Punkt können wir den Entwurf nicht mittragen, haben aber immer an der Veröffentlichung der Verträge gearbeitet und nach Wegen gesucht, wie die Wasserbetriebe rekommunalisiert werden können.*

*Welche Wege könnten das sein?*

*Vorstellbar wäre für uns, die Anteile von RWE und Veolia zurückzukaufen. Das ginge, wenn Berlin dafür Kommunalkredite aufnimmt. Da geht es um ziemliche Summen - Berlin hatte die Wasserbetriebe 1999 für umgerechnet 1,7 Milliarden Euro verkauft. Aber wenn ein Rückkauf gelänge, brächte das sichere Einnahmen für das Land und niedrigere Wasserpreise für die Bürger.“ (TAZ, Interview with the head of the Linke at the Berlin parliament, 03.11.2010).*

Hence, even though Berlin water services have historically followed their own model, pressures to come back to a model of public services gained in importance over the last years in a context of increasing water prices and resulting tensions between stakeholders inside and outside the organization. However, buying back the

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<sup>226</sup> TAZ (Lang-lendorff, A.), Rot-Rot will Berlinern das Wasser reichen, 03.11.2010

utility today would be difficult for Berlin for two reasons. First, Berlin would have to find enough financial resources and then agree on a price with private investors. Second, private investors would have to agree to sell the utility's shares. While RWE aimed to sell its shares of BWB (for financial reasons and because water is no longer its main business), Veolia has taken a clear stance on its willingness to maintain the partnership. A first step was taken recently through a process of remunicipalization of Berlin's water services. After almost two years of political debates Berlin parliament and bargaining with private investors, the Berlin senate voted on October 25, 2012 for the repurchase of 24.5% of RWE's BWB shares for € 658 million, with the endorsement of the SPD/CDU coalition<sup>227</sup>. After negotiations on a new contract with Berlin, Veolia, which has become a minor shareholder in the utility, decided to follow RWE and sale its shares back to Berlin. In the beginning of December 2013 and after 13 years of partnership, Berlin has regained control over BWB (Blanchet, 2014)<sup>228</sup>.

#### *Summary of the case*

In sum, Berlin represents a case that has not followed the standardized organization of German water services. It is also one of the few large German cities where local stakeholders succeeded in privatizing water services. The case of Berlin thus illustrates how a reform that goes against the intrinsic principles of the German water sector may take place. In addition to enacting some minor changes in the organization of the water services to deal with infrastructure investments, Berlin's local government decided to conduct some major changes by cooperating with international operators through an international call for tender. In this case, the water services of Berlin have remained independent from other urban services. Only water distribution and wastewater treatment were managed jointly. Historically, the integration of the water services with other services has always been rejected by the local government. As the city and the state are one and the same, the coordination between the local government and the utility was not influenced by any state regulation beyond city level and the administration had a strong influence on the utility. Finally, Reunification resulted in a considerable need for investment in the

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<sup>227</sup> Tagesspiegel, RWE bestätigt Verkauf der Berliner Wasserbetriebe, 30.10.2012

<sup>228</sup> BZ, Berliner Wasserbetriebe wieder zu 100 Prozent in Landeshand, 03.12.2013



infrastructure in the eastern part of the city as well as the prompting emergence of private operators interested in taking over water services. During the middle of the 1990s, the reform of BWB was put on the political agenda and a privatization of the utility went through. While the majority at the parliament rejected the alternative of integration, the proposition of the senator for finance was adopted after a long compromise with the senator for economic affairs endorsed by the CDU and the trade unions. This proposition resulted in an international call for tender, which was won by a consortium made up of Veolia and RWE. Political actors attempted to stop the privatization but did not succeed. As a result, water services were partially privatized and the local government relinquished the full control over it as the private partner had a strong influence on local water services. This reform had several consequences on Berlin's water services. Following the reform, the contradiction between fulfilling the public duty and generating profit became stronger, even though these contradictions already emerged before the privatization. The priority of shareholders' profit making — especially noticeable through a succession of a series of increases in the price of water services — resulted in conflicts between stakeholders. First, civil associations started organizing a referendum in order to get the utility back in public hands. Second, the utility's shareholders debated on lower water prices under the pressure from the cartel authority. This critical evaluation of the privatization finally resulted in new debates about remunicipalizing the utility.

## **The Leipzig water services as a case of path maintenance**

*„Leipzig ist aus zwei Gründen spannend : Auf der einen Seite eben konnte man sehen, wie der Weggang der Bevölkerung, der demographische Wandel sich auf die Wasserversorgung auswirkt, sehr spannend. Und auf der anderen Seite konnte man gucken, ob Leipzig in der Wasserversorgung, durch die von ihm gewählte Lösung und Synergien tatsächlich günstiger ist als Kommunen, die andere Varianten gewählt haben.“ (PA3)*

*Introduction: overview of the municipality and its water utility*

City profile: Leipzig, with over 515,000 inhabitants, is the eleventh largest German city and among the largest cities of the former GDR. Leipzig is part of the

State of Saxony, one of the new states created following German Reunification. During the 1990s, Leipzig's economy had to overcome two major challenges. The first challenge was the transition from a planned economy to a market economy. The second challenge was the need "to create a new economic and business structure and to integrate the existing firms into regional networks" (Heidenreich, 2005: 739). Following Reunification, Leipzig's economy was largely dependent on public funds (Miljack and Heidenreich, 2004: 2-6). In the early 2000s — and with a strong support of the local authorities — Leipzig began experiencing a significant economic improvement. Actively involved in this development, the municipality focused on five sectors, which were defined as central clusters for the city and the region: "automotive and supply industry; media/communications technology/IT; health/biotechnology/medical technology/life sciences; energy and environmental technology; cross-sectional technology and services (crafts, other processing trades, logistics, services and trade, fairs, congresses, tourism and culture in conjunction with the hotel and restaurant trade)" (Heidenreich, 2005: 748).

Leipzig's political landscape is dominated by left-wing parties and the PDS (now Linke) has been an influential political party. In the city council, this party has been usually the second or the third political party. During the municipal election of 1990, the SPD obtained 35.3% of the votes, the CDU 26.8%, the PDS 13%, the Green party 11.2% and the FDP 5.2%. During the election of 1994, while the SPD (with 29.9%) and the CDU (23.4%) lost votes, the PDS, with 22.9%, gained in importance. The Green party obtained 13.8% of the votes. In 1999, the CDU obtained the highest score with 32% of the votes, followed by the SPD with 26.2% and the Linke with 25.7%. The Green party, with a result of 7.5% share, declined in importance. During the election of 2004, period of the partial privatization attempts, the three major parties obtained narrow results: SPD (26.9%); Linke (26.1%); CDU (25.5%). During these elections, the Green party obtained 10% of the votes. Since Reunification, the mayor's elections were always won by the SPD. The attempt to reform the urban services in 2005 were conducted by the current mayor, Buckhardt Jung, who was elected after Wolfgang Tiefensee, who took up the post of federal minister for transport, building and urban development in the first Merkel government.

Municipal utility development: Historically, Leipzig water services followed a development path close to the German model of urban services. From the beginning, the municipality of Leipzig built its infrastructure without a private cooperation (Wessel, 1995: 57). From 1866 (Waterwork Connewitz) to 1943 (Waterwork Thallwitz), waterworks were built step by step in the Leipzig area. As in a great number of municipalities, the various urban services were integrated in one administration during the beginning of the 20<sup>th</sup> century.

*“In Leipzig wurden 1910 durch die Stadtverordnetenversammlung folgende »Verbände« beschlossen: „1. Es wird ein einheitliches Personal zum gemeinsamen Einholen der Gas-, Elektrizitäts-, Wassermesserstände gebildet... 2. Es wird eine einzige gemeinsame Buchhaltung an Stelle der drei getrennten Rechnungsexpeditionen gebildet ... 3. Es wird eine einzige und gemeinsame Kasse an Stelle der getrennten Kassenverwaltungen gebildet.“ (Ambrosius, 1995: 32)*

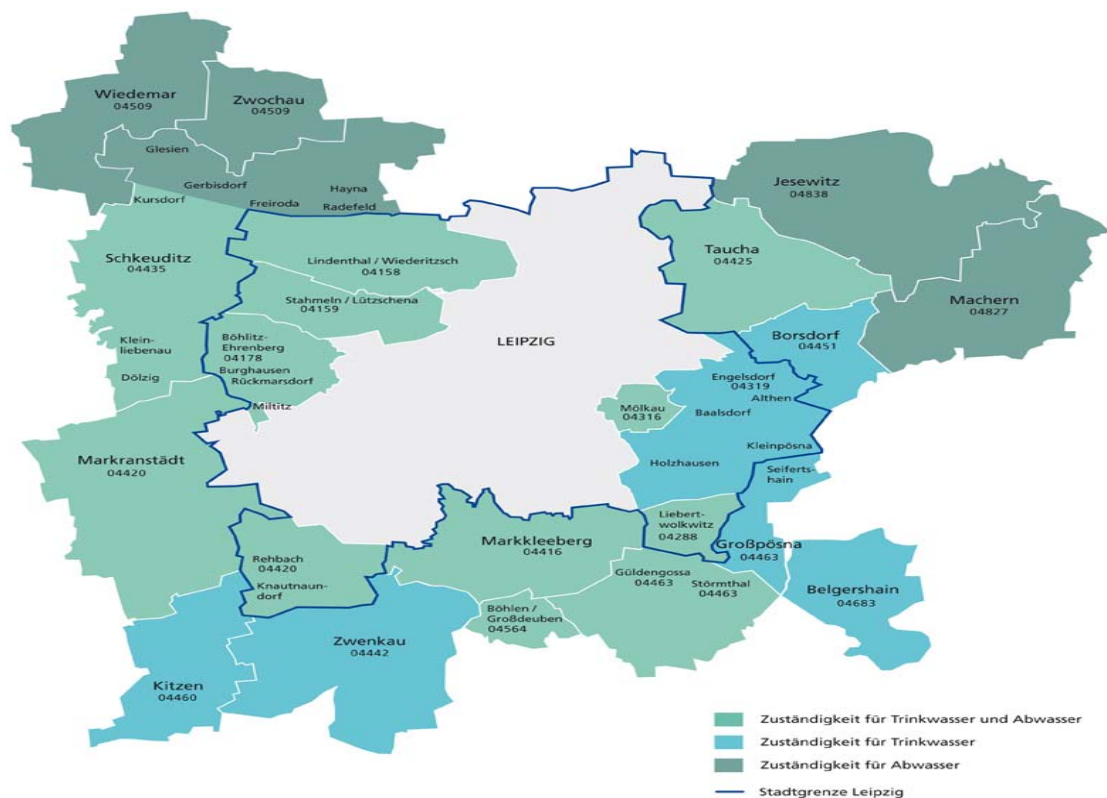
In the period of the GDR though, urban services were reorganized into centralized and separate utilities, but still in public hands. Moreover, the water distribution and sanitation were integrated into the same organization. In 1964, the Leipzig water utility was integrated into a combine, which also included the cities of Delitzsch, Eilenburg, Wurzen, Torgau, Geithain, Grimma, Döbeln, Oschatz, Altenburg, Schmölln and Borna. The management of this combine was put under the responsibility of the minister for environment.

Following Reunification, Leipzig's urban services were reorganized. Although the responsibility was transferred back in the hands of the municipality that founded municipal utilities, the various municipal services at first continued to be managed independently of each other. This was the context in which a new organization of water services was developed. As early as 1990, the Leipzig water utility became a limited liability company. The water distribution and the sanitation services have remained integrated into the same organization. In 1991, an association of cities surrounding Leipzig was created with the purpose of becoming a shareholder of Leipzig water utility. The same year, Leipzig water utility was founded with the Association of Municipal Owners (*Verein Kommunalere Anteilseigner*) as owner<sup>229</sup>. In 1994, KWL was created as the result of the decentralization process imposed by the State administrative authorities of Saxony

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<sup>229</sup> ZfK, Wasser ohne Treuhand, November 1991, p.2

(LC8). Since then, the utility has been owned by both the Leipzig municipal authority and the 13 surrounding cities and has managed the water resource in Leipzig and its surrounding area (See figure 15). Currently, KWL is, with the surrounding municipalities, one of the largest water utility in Germany. Today 74.65% of the company is in the hands of the city council of Leipzig and the remaining 24.35% belong to an association comprising 13 surrounding municipalities. Figure 16 provides an overview of the organization of the KWL structure. The utility currently delivers and disposes of water for 628,000 residents in Leipzig and its region through 6,000 km of pipes.



**Figure 15: KWL's geographical area of activity (Source: [www.zywall.de](http://www.zywall.de))**

On February, 2, 1997, the city council voted with a large majority for the creation of the LVV financial holding that brought together KWL, Leipzig energy utility (SWL) and Leipzig public transportation utility (LVB). This strategy was expected to create synergies between the utilities and enable the municipality to rely on cross-subsidies. In 2005, the mayor decided to sale shares in the energy utility, and in order to obtain a dominant coalition inside the city council, also planned to sell LVV shares that

included KWL. The goal of this privatization was to cope with a municipal financial crisis. Through LVV's partial privatization, a private partner would have become shareholder in KWL. Eventually in 2006 the bid was stopped by a citizens' initiative, which campaigned to keep the municipal utilities under public control. Table 16 summarizes the various steps of the organizational development of Leipzig's water services since 1990.

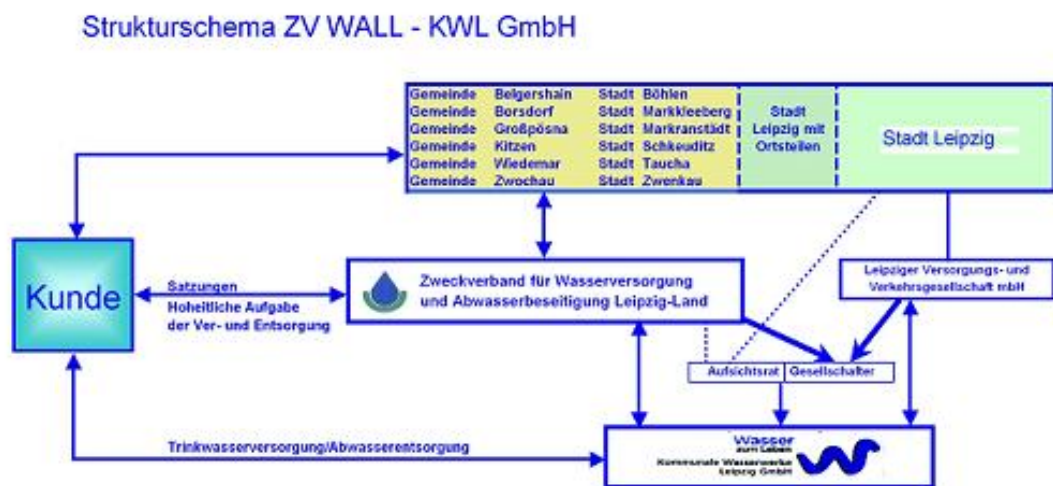
Dates	Organizational development
1990	Transformation of the VEBWAB Leipzig into a limited liability company called Water Distribution and Wastewater Treatment Leipzig ( <i>Wasserversorgung und Abwasserbehandlung Leipzig GmbH</i> )
1991	Creation of the municipal water utility Leipzig GmbH Creation of the Association for Water distribution and wastewater treatment Leipzig—Surrounding cities ( <i>Zweckverband Wasserversorgung und Abwasserbeseitigung Leipzig—Land</i> ).
1994	Transfer of the responsibility for the assets and investments into the hand of the municipal water utility Leipzig, now called, <i>Kommunale Wasserwerke Leipzig</i>
1997	Integration of KWL with the Energy Utility Leipzig (SWL) and the Public Transportation Utility Leipzig (LVB) into the Management Holding LVV.

**Table 16: The organizational development of Leipzig water services**

Outcome of interest: The KWL case first shows that despite Reunification and the emergence of financial and competitive pressures, the management of the utility has remained under the exclusive control of the municipal authorities since its foundation and has never become partially privatized. Moreover, Leipzig experienced a failed attempt at privatization and therefore at breaking with the established path. Second, despite this stability, several small transformations have been carried out in Leipzig water services in order to become more efficient and to reduce its deficit. From 1998, KWL's management board started to reform the utility. Hence, a reorganization of its internal structure took place (reduction of hierarchies, the introduction of a process orientation, formation of cost and profit centers, outsourcing). Second, the utility also attempted to enhance its performance by participating in benchmarking programs, where several German municipal utilities were compared in order to develop a set of best practices (Wummel, 2001). Moreover, a staff reduction was carried out (from 777 employees in 1999 to 583 in 2004) through retirement measures and outsourcing. Last, in addition to the integration with the surrounding municipalities, KWL was subject to an integration

that reinforced the interdependence with Leipzig's other urban services and therefore contributed to confirm the local model of urban services. Overall, while several changes have occurred in the organization of Leipzig's water services, the governance of the services has been marked by a strong stability in the governance of the services, making thus the analysis of a scenario of path maintenance possible:

- The broad institutional framework was not called into question; exogenous management models, such as joint ventures or flotation, were clearly rejected.
- Actors dealing with changes were mainly established actors and struggled against the involvement of external actors; they rejected the introduction of new solutions.
- While several changes in organizational practices and structure were necessary in order to adapt the water services to its environment, water services have remained in the hands of the municipality and the association of surrounding cities.



**Figure 16: KWL organizational structure (Source: [www.zvwall.de](http://www.zvwall.de))**

*Path-dependent mechanisms: Toward an integrated model of urban services*

Coordination between the central actors: Directly after Reunification, coordination between actors through formal rules was almost nonexistent. This can be explained by a number of events and features: the break-up of the VEBWAB (the

combines responsible for water services), the introduction of new actors, who tried to impose their own model, the transfer of competencies to new actors, as well as the absence of a regulatory framework and a real shared understanding of how the water services should be organized. Against this backdrop, the reorganization of Leipzig's water services was carried out more through informal interactions between local decision-makers than by following a legal framework (LC10). The mayor delegated the reorganization of the water services to the deputy mayor for environment, an engineer specialized in the water sector and former member of the water combine's supervisory board. This actor played a central role in the reform's process. Together with local decision-makers from other surrounding municipalities, and above all, Taucha and Schkeuditz, he shaped the structure of KWL and struggled for a publicly controlled water management between Leipzig and the surrounding cities<sup>230</sup>.

The first communal elections on May 7, 1990, and the enactment of the GDR communal law 10 days later marked the first steps of the former GDR's administrative reform by bringing back the principle of self-government (Wollmann, 1994: 20). On October 14, 1990, federal elections in the five new states took place and new councils were voted in. In Leipzig, the reorganization of the water services took place under the initiative of the municipality, as the creation of municipalities preceded the creation of the State of Saxony and the establishment of the state regulations<sup>231</sup>.

*„Es ging damals alles drunter und drüber, es gab keine Raumplanung, es gab keine raumordnerische Entwicklung und von dem Freistaat Sachsen, der ist erst später entstanden als die kommunalen Geschichten, so, es war überhaupt keine Führung da, und wo die Führung da war, Biedenkopf war der erste Ministerpräsident, hat er sich am Anfang erst nicht getraut überhaupt Einfluss zu nehmen. Die ersten, die sich gewehrt haben gegen die wilde Entwicklung, das war die Stadt Leipzig.“ (LC7)*

Following the enactment of these state regulations, local decision-makers had to debate with the state administrative authorities since the utility did not fit with the new established regulation<sup>232</sup>. As the next quotation indicates, problems for instance emerged concerning the utility's legal form.

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<sup>230</sup> Spiegel (Kohl, C.), „Andere nehmen den Strickt“, 31, 1990, p.46

<sup>231</sup> ZfK, Als Helfer der Nachbarn gefordert, March 1992, p.6

<sup>232</sup> ZfK, Sachsens Wasserrecht klären, January 1993, p.35

*„Am 23.02.1993 wurde das Sächsische Wassergesetz (SWG) veröffentlicht. Dieses Gesetz regelt:*

- die öffentliche Wasserversorgung als Pflichtaufgabe der Gemeinden (§ 57 SWG), wobei eine Übertragung dieser Pflicht nur auf andere Körperschaften des öffentlichen Rechts möglich ist;*
- die Abwasserbeseitigung als Beseitigungspflicht der Gemeinden (§ 63 SWG), wobei die Einschaltung "Dritter" lediglich als Erfüllungsgehilfen bei der Aufgabendurchführung möglich ist;*
- daß für eine Übergangszeit bis zum 31.12.1993 von den Nachfolgesellschaften der VEB WAB die Wasserversorgungspflicht wahrgenommen werden kann.*

*Damit greift das SWG direkt in bisherige Organisationsstrukturen der Wasser- und Abwasserversorgung der Stadt Leipzig ein und zwingt zu neuen verwaltungsrechtlichen Regelungen mit Wirkung spätestens ab 01.01.1994.“*  
(Stadtverordnetenversammlung Leipzig, Drucksache nr. 700, 15.09.1993: 1)

These political debates about the advantages and disadvantages of various legal forms for the utility resulted in the decision in April 1993 to keep the current form. Starting in 1994, KWL had to progressively adapt to the emerging state regulation. The establishment of this framework both reduced the scope of action and the uncertainty of local decision-makers regarding the way of organizing water services.

In addition to the increasing coordination with the state administrative authorities, local actors involved in Leipzig water services had to face other stakeholders, who aimed to carry out a privatization of the water services. During this period, the *Treuhandanstalt* (THA) — supported by private operators and utility managers — sought to impose a partial privatization<sup>233</sup>. Thus, the THA decided to transform it into a limited liability company with the expectation of conducting its partial privatization (LC7). While no privatization occurred, this specific legal form was maintained since it enabled the municipality to keep a strong control over the utility, while leaving it enough scope of action to adapt to its environment. This corporatization enabled KWL to be more independent from state regulation and local political interests once the regulative framework was put in place. As a limited liability company, KWL did not have to follow the Municipally-owned Utility Act.

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<sup>233</sup> ZfK, Entflechtung in die Pflicht – Sachsen WAB Ablösung nach eigenem Gesetz, January 1994, p.2



This solution also made the integration of ZVWALL as a shareholder in the utility possible. Leipzig's deputy mayor for the environment and surrounding cities' mayors decided to create a technical association after bargaining with the state administrative authorities. This association was seen as a compromise but also represented a suitable solution for Leipzig and its region<sup>234</sup>. On January 1, 1994, KWL was officially created. The association of surrounding cities obtained 25.1% of its shares and the city of Leipzig 74.9%. The state administrative authorities imposed this arrangement in order to distribute power between both shareholders (LC10). Hence, after several years of institutional uncertainty, coordination between actors following a specific regulation emerged.

After having lost their freedom to act during the GDR, all local decision-makers now shared the view that it was their duty to get back the control over water services. These actors were all strong supporters of a municipal model of water services and, for technical reasons, a cooperation between Leipzig and the surrounding cities (LC10). To them a partnership with a private company would reduce their control over the utility. A strongly shared understanding therefore reinforced the informal coordination between the actors. Indeed, the importance of values such as *Daseinsvorsorge* or public duty and the need to focus on the local population has dominated the discourse of most local decision-makers. The idea that water services have to be managed by a publicly owned enterprise for the sake of the local population was maintained over the years. In 2006 for instance, the then KWL marketing CEO claimed: “We are an indispensable component of the Leipzig Region<sup>235</sup>”. This strong consensus on the public duty role and the central place of KWL for the local population enforced the consistency of the local system of water services, whose actors completely rejected the introduction of private actors in these services.

Organizational and institutional complementarities: As in most of the East German municipalities, Leipzig water distribution and sanitation has remained integrated in the same organization. In Leipzig, local decision-makers took inspiration from BWB's organization and decided to maintain this integration, which

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<sup>234</sup> ZfK, Wasser ohne Treuhand – WAB Leipzig GmbH in Zweckverbände aufspalten, November 1991, p.2

<sup>235</sup> KWL, annual report, 2006, p.8

was intended to create synergies within the utility and therefore facilitate local water management<sup>236</sup>.

*“Also es zeigt sich ja auch in der Organisationsstruktur des Unternehmens: Wir haben jetzt nicht einen Unternehmensbereich Trinkwasser und einen Unternehmensbereich Abwasser. Sondern wir haben einen Unternehmensbereich Netze, in dem sowohl das Trink- als auch das Abwassernetz dargestellt sind. Und wir haben einen Unternehmensbereich Werke indem sowohl die Wasserwerke als auch die Klärwerke sind. Also diese Synergien sind eben vor allem in der Organisationsstruktur und beim Personal zu sehen. Wichtig ist da vielleicht noch zu erwähnen, dass es auf den Preis eine Quersubventionierung allerdings nicht geben darf. Es gibt da auch rechtliche Grenzen, die da gesetzt sind. Also was die Kalkulation angeht, die Preise, beziehungsweise Entgelte für Abwasser und Trinkwasser, die sind separat zu kalkulieren.” (LC3)*

As explained in this quotation however, the complementarities between the various sectors have not enabled the utility to rely on complementarities with the institutional environment. Although the integration of water distribution and sanitation has produced synergies in the structure and strategy of the organization (Bracher, 1995: 28), the regulation did not allow KWL to use mixed calculations between the activities of sanitation and water distribution.

The creation of further organizational complementarities through the integration of water, public transportation, and energy services into the same organization had already been debated from the beginning. In April 1990, Hannover's former city manager Hinrich Lehmann-Grubbe was elected as Leipzig's mayor. Supported by West German consultants, he tried to impose the integration of urban services and planned to create an integrated *Stadtwerk*<sup>237</sup>. The implementation of this project was however postponed until 1997. Following Reunification, the water and energy policies were separated and the energy utility was partially sold to RWE on the THA's initiative (LC4). On February 1997, the city council voted with a large majority for the LVV's creation, a financial holding that brought together the energy, water and public transportation utilities. On this date, KWL became — along with SWL and LVB — a subsidiary of LVV. With the creation of such an integrated holding company of this nature, synergies at the organizational level and cheaper

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<sup>236</sup> ZfK, Sachsen mit Helfern, ZfK, June 1991, p.2

<sup>237</sup> LVZ (Tappert, A.), Stadtgeflüster, 03.06.2005, p.15

services for the citizens were expected<sup>238</sup>. This transformation was mainly expected to be used in order to cope with the financing of public transportation through the electricity and the water sectors, while securing fair public transportation prices for Leipzig's citizens. Starting in 2003, the municipality was able to finance the deficit in the public services through LVV by relying on cross-subsidies between the various businesses, which for instance enabled the municipality to save €30 million the same year<sup>239</sup>. Over the years, Leipzig water services have thus become increasingly integrated in the local system of urban services.

Investment in infrastructure: “In the first half of the 1990s, the renewal of the infrastructure was the centre of attention.” (Heidenreich, 2005: 744). This task, and especially the renewal of wastewater infrastructure, was largely neglected during the GDR period. For instance, 66% of the sewers of the city had exceeded their service life, and as the residents of other former GDR cities, most of Leipzig's population had to drink water that did not meet German hygiene standards<sup>240</sup>. In the middle of the 1990s, waste water infrastructure still represented 80% of KWL's investment<sup>241</sup>. The utility also had to deal with a great number of leaks — which significantly increased because of the intensification of lorry traffic in and around Leipzig — to conform to national and European norms, above all regarding water quality<sup>242</sup>. Between 1990 and 2004, KWL renovated 476km of its water distribution pipes and expected to renovate 500km more until 2020<sup>243</sup>. The shrinking population after Reunification also impacted the municipal investments in infrastructure (See Figure 17). In addition to depopulation, the water consumption of the local population steadily decreased during these years. This general decrease in the water production led first to a diminution of the profits, and consequently a increase in water prices, and second to the necessity to adapt the infrastructure to the local context.

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<sup>238</sup> LVZ (Orbeck, M.), Parlament genehmigte Stammkapital für Gesellschaft, 20.02.97, p.13

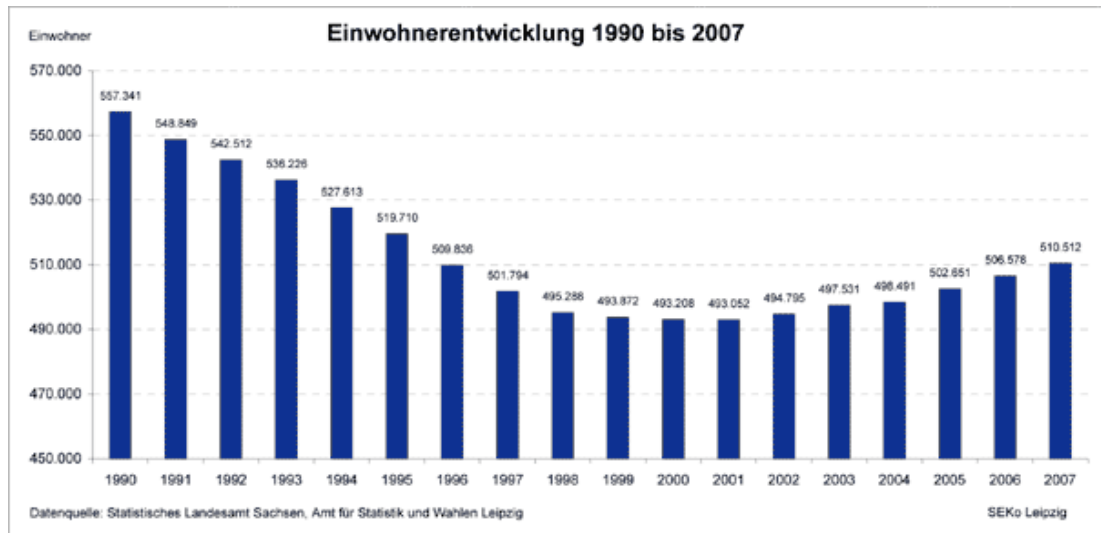
<sup>239</sup> LVZ (Tappert, A.), Leipzig muss kein Geld Zuschüssen, 01.07.2004, p.13

<sup>240</sup> Spiegel, Saumässig abgeleitet, 36, 1991, p.73

<sup>241</sup> LVZ (Tappert, A., Herzberg, H.), „Unsere Möglichkeiten sind ausgereizt“, 27.11.1996, p.20

<sup>242</sup> ZfK, Entflechtung in die Pflicht, January 1994, p.2

<sup>243</sup> ZfK, Gussrohre eingepresst, July 2004, p.13



**Figure 17: The demographic development in Leipzig after Reunification (Source: city of Leipzig : <http://www.leipzig.de/de/buerger/stadtentw/konzept/inhalt/> )**

This attempt was made more challenging by the utility's lack of technical and managerial competencies. Under the GDR government, the economy was politically regulated and combines were not managed according to the rules of a market economy. In order to compensate for this deficiency, various technical and management training sessions and working groups were organized<sup>244</sup> with the support of VKU and partially of managers from Western German utilities. For instance, the latter organized procurement seminars since such practices did not exist during the GDR (LC8).

In total, KWL had to invest around €0.72 billion between 1990 and 1999 in its supply area — €434.6 million in the wastewater sector and €245.4 in the water distribution<sup>245</sup>. The investments were compensated through loans and regular increases in water prices<sup>246</sup>. However, the KWL managers were not allowed to increase water prices too much. For instance, members of the city council who declared that the KWL management was not efficient enough criticized the price increase by 30% between 1996 and 1997. As stated by the former utility director, because 90% of the water prices cover fixed costs, the important decrease of water

<sup>244</sup> ZfK, Schneller oder Sachgerechter?, April 1992, p.7

<sup>245</sup> KWL, annual report, 2000, p.8.

<sup>246</sup> LVZ, Geschäftsführung will in zwei Jahren eine "schwarze Null" schreiben, 16.01.98, p.11

consumption (from 200 to 116 liter/day/citizen between 1996 and 1997) resulted in water production and thereby eroding of KWL's sales revenue<sup>247</sup>.

*“Der erste kaufmännische Geschäftsführer, Herr H., war am Anfang überfordert. Er hat sich kaputt gemacht mit dem Job. Aber man muss sehen: Die Einnahmen der Wasserwerke sind jedes Jahr weiter eingebrochen. Er hat am Anfang mit einem Unternehmen gearbeitet, wo Nichts stimmte und das ist natürlich für einen kaufmännischen Geschäftsführer eine wahnsinnige Belastung. Auf der einen Seite musste investiert werden, es musste weiter gehen, und auf der anderen Seite sind die Einnahmen ständig weggebrochen. Wir müssten jedes Jahr die Wasserpreise anheben.” (LC7)*

In such a situation, local decision-makers are usually more aware of alternative courses of action — such as privatization — in order to support for instance the building of infrastructure. Moreover, the municipal debt had grown yearly and the financial situation of Leipzig had been a burden for the local decision-makers. This municipal debt started in 1992 and reached a debt rate of €911.6 million in 2004<sup>248</sup>.

In 2001 however, after KWL's reorganization (1998), local stakeholders considered that the utility had succeeded in managing its investments problems. The reorganization permitted KWL to reduce the utility deficit (to €42.8 million in 1999) and even to make a profit for the first time in 2000 (€15.63 million)<sup>249</sup>. This profit is also correlated with an increase in water consumption and therefore in KWL's sale revenues but also with lower investment (for instance from €114.53 million in 2000<sup>250</sup> to €64.42 million in 2001)<sup>251</sup>.

#### *Power distribution and actors' strategies in reforming water services*

The idea of carrying out a privatization of Leipzig's water services was already debated following Reunification and discussed during the 2000s in the city council. In the early 2000s, this debate was triggered by the activity of the water utility, and more specifically because of the increases in water prices<sup>252</sup>. This price increase was strongly criticized by various local stakeholders such as consumer

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<sup>247</sup> LVZ (Tappert, A., Herzberg, H.), „Unsere Möglichkeiten sind ausgereizt“, 27.11.1996, p.20

<sup>248</sup> Stadt Leipzig, Bericht zum Zins- und Schuldenmanagement 2008/2009, p.7

<sup>249</sup> ZFK, KWL erwirtschaften erstmal Gewinne, 08.2001, p.9

<sup>250</sup> KWL, annual report, 2000, p.8

<sup>251</sup> KWL, annual report, 2001, p.8

<sup>252</sup> LVZ (Tappert, A.), Viele Abgeordnete nahmen aktuelles Abrechnungsmodell kritisch unter die Lupe, 06.01.2000, p.13

associations, citizens and local enterprises<sup>253</sup>. In January 2000, the city council discussed possible alternatives in order to reduce water prices. A faction of the CDU tabled a motion for the KWL privatization. According to the deputy-head of the CDU parliamentary party, the purpose of this motion was not ideological but to improve the utility's performance, obtain stable prices, and prepare the utility for the future market liberalization, as had been done with the privatization of the energy utility in 1998<sup>254</sup>. However, the CDU could not secure enough endorsement within the city council. This debate went on the political agenda for the first time in 2005<sup>255</sup>, during the attempt of the municipality to privatize a part of SWL and, following this, a part of LVV. In 2005, the Leipzig debt reached €940 million and the pressures of the state administrative authorities to find a solution increased<sup>256</sup>. During these years, several waves of privatization occurred in Saxony. Dresden's public housing utility was for instance sold to FORTRESS, an investment management firm based in New York (Nagler, 2007: 43).

Actor coalitions supporting a reform: These discussions about privatizing urban services became more concrete in 2006 following the election of a new mayor, Buckhardt Jung, who put the privatization issue on the top of his political agenda<sup>257</sup>. His project was presented at the city council without prior discussions with the other parties. His priority was to privatize 49.9% of the SWL in order to reduce the municipal debt and therefore meet the state administrative authorities' requirement of coping with its financial issues<sup>258</sup>. To realize his project, Jung needed political allies in order to obtain a majority of votes in the city council. However, only a part of the SPD supported his proposition. The CDU and the FDP argued that the solution was unsatisfactory and demanded the sale of more utilities<sup>259</sup>. The *Linke* and Green parties stood against a privatization of Leipzig's municipal services. In order to build

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<sup>253</sup> LVZ (Rometsch, J.), Geschäftsführung erwartet für dieses Jahr 20 Millionen Mark Gewinn, 02.09.2000, p.13

<sup>254</sup> LVZ (Müller, T.), Fraktion erläutert Anträge zu Wasserwerken und Lkomm, 22.01.2000, p.15

<sup>255</sup> LVZ (Dunte, A., Rometsch, J.), Wasserwerke und Stadtreinigung sind heiße Privatisierungskandidaten, 10.05.2005, p.13

<sup>256</sup> LVZ (Tappert, A., Milde, U.), LVV-Chef Klein will auf Kosten-Bremse treten und Investitionen verringern, 13.02.2006, p.11

<sup>257</sup> LVZ (Tappert, A.), Gegen den geplanten Anteilsverkauf der Stadtwerke Leipzig formiert sich Widerstand, 18.07.2006, p.11

<sup>258</sup> LVZ (Milde, U. et al.), Oberbürgermeister Jung will Beteiligungen veräußern, 21.07.2006, p.11

<sup>259</sup> LVZ (Milde, U.), Morlok stellt Bedingungen für Zustimmung zu Stadtwerke-Teilprivatisierung, 04.11.2006, p.19

a dominant coalition, the mayor had to make a new proposition. Two possibilities were open to him: either giving up the privatization and carrying out a merger between SWL and KWL, or extending the privatization to LVV. In the first case, he would have had the support of the SWL management board and the *Linke*. In the second case, he could rely on a large consensus with the FDP and the CDU in the city council. The mayor made a new proposition that consisted in privatizing SWL and LVV. The compromise was first to sell SWL in 2007 and then LVV in 2009<sup>260</sup>. A privatization of KWL and the municipal disposal utility was further discussed in the various political parties (CDU, FDP and also Greens) because of their high market prices. During these debates, the sale of municipal companies not governed by the principle of *Daseinsvorsorge* — Perdata, a utility specialized in the data management, for instance — were especially emphasized.

*“Im Stadtrat ist es so gelaufen: die SPD und die CDU konnten eine Mehrheit kriegen, waren aber nicht so einig. Die SPD wollte nur einen Anteil der SWL verkaufen, die CDU am Liebsten die LVV und, um eine Mehrheit zu kriegen, haben sie ein Kompromisspaket gemacht und das hieß: erstens bis zu 49% der SWL-Anteile sollten verkauft werden. In einem zweiten Schritt sollte der Verkauf von 25% der Anteile der LVV eingeleitet werden.” (LC2)*

The privatization project was eventually supported by a weak majority in the city council, which voted with 34 votes against 32 for SWL's partial privatization as well as for the preparation of the LVV partial privatization on November 15, 2006<sup>261</sup>. However, the goals of actors who constituted the political majority in favor of privatization diverged. This ambiguity created a situation of uncertainty concerning the future development of the municipal utilities. Following the decision to sell a part of SWL's shares, the FDP and CDU demanded the mayor to define an alternative project for the privatization of LVV. However, while the mayor agreed on a compromise to obtain a majority, he was reluctant to sell more than a part of SWL's shares<sup>262</sup>. Members of the CDU, who claimed that it was difficult to work with someone who announced a lot but did not implement it, criticized this behavior<sup>263</sup>.

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<sup>260</sup> LVZ (Tappert, A.), Jung, SPD und CDU wollen Stadtwerke und LVV verkaufen, 01.11.2006, p.15

<sup>261</sup> LVZ (Staubert, K.), Mehrheit für Privatisierungspläne von Oberbürgermeister Jung steht auf wackeligen Füßen, 15.11.2006, p.17

<sup>262</sup> LVZ (Staubert, K., Brandt, K-U), Ohne konkreten Privatisierungsfahrplan droht Stadtverke-  
verkauf zu scheitern, 18.06.2007, p.17

<sup>263</sup> LVZ (Milde, U.), Alexander Achminow über Privatisierung, Oberbürgermeister und Linkspartei,  
16.04.2007, p.19

The head of the Green party also criticized its political leadership as being too weak and its policy too volatile<sup>264</sup>.

*“Der Stadtratsbeschluss beauftragt den Oberbürgermeister darüber hinaus, bis zum 30. Juni 2009 einen Vorschlag zur Veräußerung einer Minderheit der Gesellschaftsanteile an der LVV GmbH im Rahmen eines internationalen Bieterverfahrens vorzulegen. Bei der Bemessung der Anteile ist sicherzustellen, dass die Stadt Leipzig aus strategischen Gründen ihren bestimmenden Einfluss auf die Versorgungsunternehmen SWL, KWL und LVB behält.“ (bbvl, Rechtliche und wirtschaftliche Aspekte einer Teilprivatisierung der LVV, 2007:3)*

To make a future LVV privatization more concrete, the mayor suggested a privatization model called “*Tracking-Stock Modell*”. According to this model, one or more private operators would have the possibility, after an international call for tender, to buy shares in LVV, but would have influence only at the level of individual subsidiaries as KWL or LVB<sup>265</sup>. Moreover, the municipality of Leipzig would have to keep the majority of the shares in order to maintain cross-subsidies (bbvl, 2007:4).

The mayor's privatization project was supported by the LVV's and SWL's CEOs, who were involved in drawing up the concrete project<sup>266</sup>. By these means, they could expect to obtain an interesting position inside the new utility (LC4). In March 2007, SWL's CEO Wille presented a strategic paper, which proposed merging SWL and KWL before privatization<sup>267</sup>. The first solution would have been to sell shares of KWL and the second one to sell LVB, SWL and KWL after having merged them. To him, this integration was expected to produce synergies and was a strategy widely used all over Germany. In accordance with this model, the former CDU assistant of the mayor for economic affairs suggested bringing the utilities together in a joint-stock company, to privatize a part of the company in order to bring in competencies from the private sector, and to sell around 25% of shares to citizens.

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<sup>264</sup> LVZ (Milde, U.), Grünen-Fraktionschef Wolfram Leuze über Privatisierung, Rathauspitze und einen Leipzig-Traum, 02.05.2007, p.18

<sup>265</sup> LVZ (Staubert, K.), Verkehrsbetriebe Jung stoppt Privatisierung von Tochterfirma, 23.04.2007, p.17

<sup>266</sup> LVZ (Milde, U. et al.), Oberbürgermeister Jung will Beteiligungen veräußern, 21.07.2006, p.11

<sup>267</sup> LVZ (Tappert, A.), Stadtwerke-Chef Wille bringt die Privatisierung weiterer kommunaler Firmen ins Gespräch, 15.03.2007, p.20



*“Ich hätte sogar die Verkehrsbetriebe auch noch integriert, weil ich viele Synergien sehe im Bereich der Infrastruktur. Diese Infrastruktur hätten wir koppeln können. Also das ist meine tiefe Überzeugung und dann hätte ich daraus eine AG gemacht und hätte den Bürgern — weil wir ja immer über Bürger Partizipation sprechen und in Wirklichkeit partizipieren sie gar nicht — ich hätte den Bürgern von mir aus 24% der Aktien geboten.” (LC 6)*

Although LVV's CEO Klein also supported these public utility reforms, he also argued in line with the mayor that it was crucial to keep the majority of the shares in order to maintain the financial advantages from the cross-subsidies<sup>268</sup>. The financial support created by the cross-subsidies to fund the public transportation's deficit was a real issue in this privatization program and the public transportation company should not suffer as a result of the partial privatization. To him, the private partner should make profits from utility efficiency improvement and cost reduction. Increases in price should be avoided. Beyond these political debates, the coalition supporting the privatization did not conduct a real campaign for the privatization since they thought that the process would be successful and that the citizens' initiative would fail. The FDP was the only political party to campaign for a privatization by hanging around 1000 posters (LC1).

During these debates on privatization, reformers used mainly financial and economic arguments to justify the privatization. For this coalition, a privatization was necessary for the city to address its budget's deficit. Hence, a partnership with a private operator would first enable the municipality to pay off its debts and to increase its financial scope of action. The CDU and the FDP, who aimed to privatize the holding, relied on the same types of arguments. However, they criticized the mayor for doing just half of the job. They argued that by merely selling a part of SWL the budgetary issue would not be solved and Leipzig would still have to pay interest<sup>269</sup>. By contrast, the price generated by selling LVV would enable the municipality to clear its entire debts, including the interest. Both parties agreed on the necessity to have a strong partner in each of the sectors covered by LVV. The partial privatization would enable the utilities to rely on a strong partner in order to

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<sup>268</sup> LVZ (Milde, U.), Spätestens im Sommer 2007 soll Anteilsverkauf der Stadtwerke perfekt sein, 27.07.2006, p.13

<sup>269</sup> LVZ (Staubert, K.), Schuldenfreies Leipzig bis 2012, 14.10.2006

improve its competitive potential and its development on a competitive market<sup>270</sup>. Cooperating with private partners would enable the utilities to benefit from new capital and competencies, and force them to be managed with more cost-oriented methods. The mayor also argued that the utilities' environment would become increasingly competitive. The private partner would also support the utility's business development in new sectors, which would have positive consequences at the local level through the creation of new employment<sup>271</sup>. For the FDP, the example to follow was the Mannheim utility (MVV), which was a multi-utility active at the international level. Adopting this model would not only have positive consequences for the municipality but also reinforce the utilities' competition in each of these sectors<sup>272</sup>. In addition to the positive budgetary and economic consequences of such a partial privatization, these actors also emphasized the negative social and political consequences that would derive from not privatizing municipal utilities. First, the state administrative authorities would implement a budget freeze and establish a compulsory administration (*Zwangsverwaltung*). The municipality would lose its duty of self-governing. Moreover, the price paid by the private partner would not only enable the local government to pay-off the municipal debt but would also make it invest in further municipal organizations, such as in schools and nurseries<sup>273</sup>.

*„Die (the municipal administration) haben juristisch das Bürgerbegehren überprüft und haben auch politisch dagegen gearbeitet, indem sie argumentiert haben, dass diejenigen, die das Begehren unterstützen, dazu beitragen, dass die Stadt sich weiter verschuldet, dass die Stadtwerke nicht zukunftsfähig sind. Sie haben gesagt, wenn wir den Verkauf verhindern, dann werden wir die Kinder enttäuschen und die Schulen weiter verfallen lassen und die Straßen, und wir sind bald so hoch verschuldet, dass die Stadt sich bald nicht mehr verwalten kann, sondern, dass die Landesregierung jemand ansetzt, der kommissarisch die Stadt verwaltet, und also die Kommunale Selbstverwaltung aufgibt. Das waren die ständigen Diskussion gegen uns.“ (LC2)*

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<sup>270</sup> LVZ, (Milde, U.), Alexander Achminow über Privatisierung, Oberbürgermeister und Linkspartei, 16.04.2007, p.19

<sup>271</sup> LVZ (Dunte, A., Rometsch, J.), Wasserwerke und Stadtreinigung sind heiße Privatisierungskandidaten, 10.05.2005, p.13

<sup>272</sup> LVZ (Staubert, K., Brandt, K-U), FDP-Chef für Umwandlung des Stadtkonzerns in Aktiengesellschaft, 22.09.2006, p.13

<sup>273</sup> LVZ (Staubert, K.), Stadtwerke-Verkauf: Vier endgültige Angebote, 30.10.2007, p.17

Actor coalitions challenging the reform: In Leipzig a strong coalition of actors campaigned for maintaining the public organization of urban services. During the reform attempts of 2005, both KWL's CEOs attempted to influence the decision-making process against a privatization. They relied on their expertise and local reputation to counteract the privatization. When the SWL's commercial director and the former assistant of the mayor for economic affairs for instance suggested merging SWL with KWL, the KWL managers in chief criticized this project for being too complicated (both enterprises have different price systems) and too costly<sup>274</sup>. In 2007, the SWL's commercial director produced a strategic paper concerning the future of the municipal utilities<sup>275</sup>. This paper led to a conflict with KWL's technical managing director because it was transferred to the steering committee (*Lenkungsausschuss*) without prior discussion with the other utilities' managers. Moreover, in reaction to this new attempt by SWL's commercial director to convince local decision-makers to merge and sell utilities, KWL's technical director asked for the resignation of SWL's commercial director and resigned from his own position on the holding company's management board<sup>276</sup>. In these debates, the KWL managers could rely on a solid reputation, since they were perceived by a great number of local actors as the ones who succeeded in securing the utility's recovery through reorganization. KWL's management board could also rely on the ZVWALL. While this actor did not take part in the debates, they were also against a KWL privatization and could rely on their blocking minority in order to hinder it (LC8).

*“Der Gesellschaftsvertrag der KWL normiert in § 12 Abs. 1 die generelle Zustimmungspflicht der Gesellschafterversammlung zu einer Veräußerung von Anteilen an der KWL. In § 12 Abs. 2 sind zudem gegenseitige Vorkaufsrechte festgelegt. Dies verhindert sehr wahrscheinlich eine Veräußerung der KWL auf Teilkonzernebene, da der Mitgeschafter Zweckverband für Wasserversorgung und Abwasserentsorgung Leipzig-Land (ZVWALL) bereits mehrfach deutlich signalisiert hat, dass er einer Privatisierung der KWL nicht zustimmen kann.”*  
(bbvl, *Rechtliche und wirtschaftliche Aspekte einer Teilprivatisierung der LVV*, 2007:3)

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<sup>274</sup> LVZ (Tappert, A.), Neben Privatisierungen sind auch Umschuldungen und eine Fusion im Gespräch, 06.09.2006, p.17

<sup>275</sup> LVZ (Tappert, A.), Stadtwerke-Chef Wille bringt die Privatisierung weiterer kommunaler Firmen ins Gespräch, 15.03.2007, p.20

<sup>276</sup> LVZ (Tappert, A.), Stadtfirmen Gerüchte über Rücktritt von Schirmer, 27.03.2007, p.15

In the city council, the opposition — made up of the Green and the Left parties — relied on various strategies in order to fight the dominant coalition. In addition to criticising the privatization project<sup>277</sup> and attempting to stop it through a motion<sup>278</sup>, they also cooperated with the APRIL (*Antiprivatisierung Leipzig*) network, in which several members of the city council were directly involved<sup>279</sup>. This initiative was founded in 2006 in reaction to the attempt from the CDU and FDP to privatize the municipal housing utility. The network played a crucial role in the decision-making process. It influenced the privatization process by drawing on laws that enable citizens to be involved in decisions regarding important municipal issues, and mobilized citizens through an important work of public debates and mediation. Its prime goal was to follow the debates on privatization and increase public awareness about the privatization issue. In 2004, the environmental association BUND, the trade-union Ver.di, and ATTAC requested at the city council that every privatization attempt had to be discussed with the local population before<sup>280</sup>.

*“Wir haben uns am Anfang ehe theoretisch mit dem Thema auseinandergesetzt, Stadtrat-Vorlagen immer angeschaut im Vorfeld, was steht darin, was sind die Positionen der einzelnen Parteifractionen, was sagen die Mieter dazu, die Gewerkschafter dazu, was in den anderen Städten passiert ist, was ist in Hamburg gewesen oder was ist in Dresden gewesen, warum wurde das privatisiert, was waren die Gründen usw. Oder nach Berlin, warum hatte man auch zum Teil privatisiert gehabt oder auch nach Freiburg, wurde das dort verhindert und mit welchem Gründen. Wir haben uns auch angeguckt, welche Akteure sind auf dem Markt aktiv.” (LCI)*

After the city council voted for the privatization, the APRIL network decided to react. On November 14, 2006, date of the official decision, more than a thousand utility employees and students protested in the city hall against the privatization<sup>281</sup>. Following the vote of the city council, the network continued its debates with the CDU and the SPD. In June 2007, after the city council announced that the call for tender would be organized and that the partner would be selected in October, the

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<sup>277</sup> LVZ (Milde, U. Tappert, A.), Linkspartei kritisiert Privatisierungspolitik von Oberbürgermeister Bukard Jung, 12.04.2007, p.18

<sup>278</sup> LVZ, Grüne scheitern mit Beschwerde zu Stadtwerken Leipzig, 08.05.2007, p.15

<sup>279</sup> LVZ (Raulien, A.), Privatisierung Netzwerk verteilt heute Verbotsschilder, 14.11.2006, p.15

<sup>280</sup> LVZ (Tappert, A.), Energie, Wasser, Verkehr - stadteigene Firmen dominieren das Wirtschaftsleben an der Pleiße 15.09.2004, p.21

<sup>281</sup> LVZ (Raulien, A.), Privatisierung Netzwerk verteilt heute Verbotsschilder, 14.11.2006, p.15

members of the network decided to organize a citizens' initiative<sup>282</sup>. During the first step of the initiative, 20,500 signatures had to be collected in two months — representing 5% of the municipal eligible voters<sup>283</sup> — if it wanted to stop the privatization process. For that purpose, they distributed fliers and put up posters, published statements in the local newspapers, and organized 30 contact points in the city where it was possible to sign the petition. They also discussed with the backbenchers of the CDU and the SPD in order to influence them on the privatization issue<sup>284</sup>. On November 6, 2007, the organizers delivered more than 40,000 signatures to the city council<sup>285</sup>. After a legal check of the signatures, the mayor decided that the referendum would take place on January 27, 2008. This was the earliest date that the mayor could choose, and was intended to give the initiative organizers as little time as possible to organize the vote. The second step of the initiative thus started, which consisted in mobilizing the citizens to vote against the privatization.

*“Wir sind dann in den zweiten Teil der Kampagne gegangen. Der erste Teil von der Bewegung war gar nicht für oder gegen Privatisierung, sondern wir haben uns konzentriert auf den Fakt, dass die Bürger mitentscheiden sollten bei diesem Verfahren und nicht nur das Parlament. Das ging darum, dass die Leute überhaupt mitbestimmen sozusagen. Im zweiten Teil, als es klar war, da gibt es den Bürgerentscheid, dann haben wir klar gegen den Verkauf argumentiert.”*  
(LCI)

The network campaigned by trying to make citizens aware of the importance of keeping a municipally-owned utility. Between December 25, 2007 and January 16, 2008, they put up around 6000 posters<sup>286</sup> in the city and published a newspaper with arguments against the partial privatization<sup>287</sup>. In both media, the message was to show the importance of municipal utilities for the city. In order to involve the citizens in the process, APRIL's members worked on reinforcing the link between the utility and the citizens. For that purpose, they argued on the importance of public

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<sup>282</sup> LVZ (Tappert, A.), Initiative will „Ausverkauf“ stoppen, 30.08.2007

<sup>283</sup> In Saxony, the numbers of signatures to be collected can vary between 5% and 15%. Each municipality has to legally define the % of signatures.

<sup>284</sup> LVZ (Tappert, A.), „Notfalls ziehen wir vor Gericht“, 02.10.2007

<sup>285</sup> APRIL network, Übergabe der Unterschriften an Oberbürgermeister – Bürger fordern Mitbestimmung ein, 04.11.2007

<sup>286</sup> APRIL Network, Bürgerentscheid: Aktionsstart zwischen den Feiertagen, press release, 23.12.2007

<sup>287</sup> APRIL Network, Bürgerentscheid: Start der Zeitungskampagne "Ja zu Leipzig!", press release, 17.01.2008

service delivery for the municipality and its citizens and worked on diffusing a good image of the utilities among the local population. They sought the support of local artists during public speeches in order to influence the citizens. Moreover, the network worked on the diffusion of a negative image of the privatization. Thus, they invited actors from other cities that had already experienced a partial privatization in order to relate its negative consequences<sup>288</sup>. By bringing various issues to the public and by debating with all kinds of political camps, they contributed to the delegitimization of the privatization alternative.

*“Diese Unternehmen, die dienen der Infrastruktur der Städte. Also das sollte nicht im Wettbewerb stehen mit anderen Sachen, sondern das hat eindeutig die Versorgung der Bürger oder der Stadt mit dieser Sache, hat Vorrang. Und von daher sollte das ganz klar von Natur aus in Händen der Stadt sein, und das sollte auch hier entschieden werden und deswegen sollte das nicht privatisiert werden. Und darum ist das auch gut so wie das momentan ist.” (LC1)*

On January 27, 2008, the Leipzig’s citizens were asked to answer the following question: “Do you agree that the Leipzig municipal utilities and plants governed by the *Daseinsvorsorge* remain 100% in municipal ownership?” (See figure 18). 87.4% of the voters answered the question with yes, stopping therefore the sale of the utilities and blocking any privatization for the next four years. To be valid, 25% of the eligible voters had to participate in the local referendum. The participation rate reached 41% of the eligible voters<sup>289</sup>.

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<sup>288</sup> LVZ (Milde, U.), Privatisierung II, Diskussionsforum zu Stadtwerken, 29.10.2007, p.17

<sup>289</sup> APRIL Network, Leipziger erteilen Privatisierungsplänen klare Absage, press release, 28.01.2008

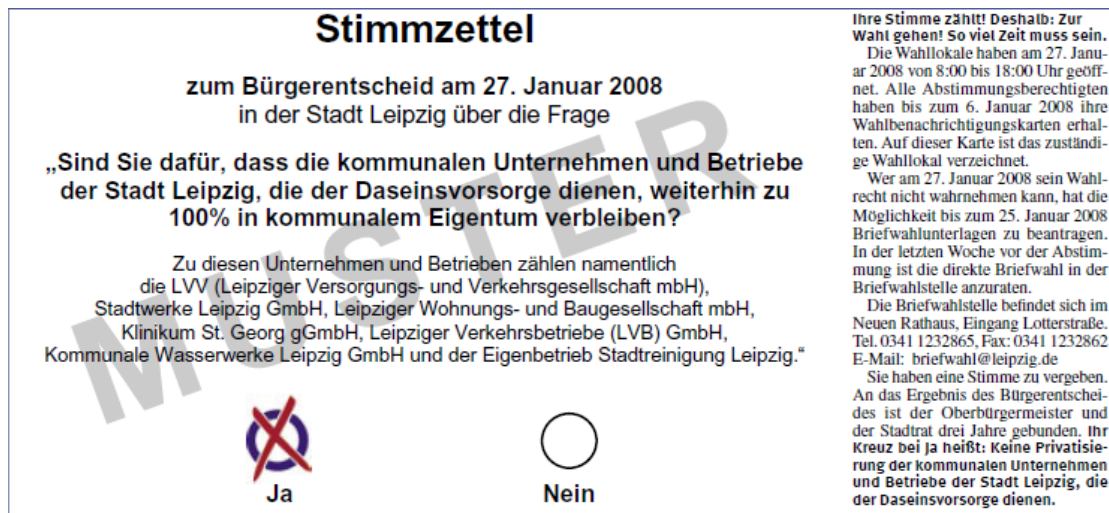


Figure 18: Ballot paper for the Leipzig local referendum

Overall, the actors struggling against a privatization of urban services argued that the utilities were profitable enterprises and that a privatization would only have negative consequences on the city's economy as well on the quality and the price of the services<sup>290</sup>. With the slogan "Communal is optimal", the APRIL network conducted a significant campaign on the importance of the utilities for the municipality and its citizens and on the dangers of privatizing the utility<sup>291</sup>. First, they argued, privatization would lead to short-term profits for the municipality. In the long term however, it would have negative consequences on the municipal finances since a part of the yearly profit generated by the utility would have to be shared with the private partner. Second, utilities are an essential instrument for the municipal economy and privatization would weaken the utility, since it would lead to a centralization of a part of the value chain and lead to significant lay-offs.

*"Das war auch damals unsere Sorge bei der Arbeitsplatzversicherung, dass bestimmte zentrale Bereiche in Leipzig wegfallen und verlagert werden. Also auch Verlust an Qualität an Arbeitsplätzen und letztendlich von Kundennähe. Weil wir das wissen, müssen wir als Gewerkschaft per se dagegen sein. Und das andere ist, dass wir denken, dass es einen Verlust an demokratischer Kontrolle über die Versorgung gibt. Gewinne die hier gemacht werden, fließen ab. Sie kommen nicht in die Stadtkasse. Andere Leistungen, die die Stadtwerke errichten über Sponsoring (kulturell, Sport oder Wissenschaft) sind alle davon abhängig wie die*

<sup>290</sup> LVZ (Milde, U.), Grünen-Fraktionschef Wolfram Leuze über Privatisierung, Rathauspitze und einen Leipzig-Traum, 02.05.2007, p.18

<sup>291</sup> LVZ (Tappert, A.), Energie, Wasser, Verkehr - stadteigene Firmen dominieren das Wirtschaftsleben an der Pleiße 15.09.2004, p.21

*Konzernzentrale das sieht und und und. Von daher ist es wichtig, dass man es den Bürgern klar macht.” (LC2)*

Opponents of the reform also claimed that a partial privatization would automatically lead to a price increase and threaten the cross-subsidies<sup>292</sup>. These arguments were also used by KWL’s CEOs who argued that the utility was not only an important actor for the local and regional development but also a well-functioning enterprise, which had demonstrated that it could cope with a difficult post-reunification context through important investments without hiking water prices too much<sup>293</sup>. They also promoted the utility’s commitment at the local and regional levels and presented itself as a major actor for the local economic development. They underlined that 90% of the contracts are conducted with local businesses and that these would be threatened in case of privatization. Green and Linke members of the city council also followed a similar line of argumentation, which was based on the responsibility of the municipality to provide a cheap, good quality service to secure citizens’ welfare, the financial long-term consequences of a privatization, and the necessity for the municipality to maintain control over the municipal utilities<sup>294</sup>. For them, a privatization would lead to wages and investment cuts. Moreover, a partial privatization would threaten the cross-subsidies, which is a crucial financial instrument for the municipality.<sup>295</sup> As a consequence, the municipality would have to pay several millions yearly to finance public transportation or increase prices for the service.

The relationships between local decision-makers and private operators: In Leipzig, private operators attempted to expand their activity shortly after the fall of the Wall. For that purpose they could rely on the THA that aimed to sell the utility to private investors. For private operators, this situation was a good opportunity to suggest solutions to the problems encountered by the local water utility without having to deal with the state regulation. The French companies Lyonnaise des Eaux and Veolia attempted to establish cooperation with local decision-makers.

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<sup>292</sup> LVZ (Milde, U.), Spätestens im Sommer 2007 soll Anteilsverkauf der Stadtwerke perfekt sein, 27.02.2006, p.13

<sup>293</sup> LVZ, Kommunale Wasserwerke Leipzig – Ein Unternehmen mit Tradition, 07.09.2005, p.11

<sup>294</sup> LVZ (Milde, U. Tappert, A.), Linkspartei kritisiert Privatisierungspolitik von Oberbürgermeister Bukard Jung, 12.04.2007, p.18

<sup>295</sup> LVZ (Milde, U., Tappert, A.), Wasserwerke wollen wachsen, 12.09.2006, p.16



*„Genauso haben wir dann zu der THA gesagt, na bitte schön, die Wasserwerke in Leipzig die Kläranlage Rosenthal, die Städtischen Güter die dazu gehörten, das ist alles Eigentum der Stadt Leipzig und wir wollen das zurück haben. Restitution (...) die THA hat mit Händen und Füßen daran festgehalten. Sie wollten uns das nicht rausrücken und da waren von Vornherein auch Lobbyinteressne da, dass also zumindest teilweise, da gab es ein französischen Interessenten.“ (LC7)*

However, these private investors were not successful in Leipzig and were unable to cooperate with local decision-makers. According to a local stakeholder, private operators were present after Reunification but had never represented a real threat to local decision-makers (LC8). Similar views were shared by all the interviewees despite the increasing development of private water operators throughout Saxony.

*“Ich habe damals auch einen Vertreter, es war wahrscheinlich ein von Privaten Beauftragter, der Générale des eaux. (...). Da war jemand da, ein netter interessanter Mann auch, guter Fachmann und hat mir auch erzählt, dass sie besser können als wir. (...). Also die Defizitgeschäfte waren sozusagen nicht interessant genug. Ich habe durchaus einen Test gemacht, ob Interesse da ist, ob Leute sich da einarbeiten, sich für die Geschichte interessieren. Und ich muss sagen, da bei diesem Französischen Staatskonzern habe ich nie ernsthafte Arbeit gespürt.“ (LC7)*

In the 1990s, private operators like OEWA had increased their partnerships with local authorities in Saxony. The company emerged in 1991 through the creation of a joint venture between *Generale des Eaux* and *Veba Kraftwerke Ruhr* and became a subsidiary wholly owned by Veolia Wasser on January 1, 1998. Since September 1997, OEWA headquarters has been located in Leipzig. Starting with only 4 employees in 1997, the company employed 80 people in its office in Leipzig in 2005<sup>296</sup>. Despite no long-term cooperation with KWL, OEWA has remained active in Leipzig through various projects. The company has for instance supported sports events, cultural events like the famous Bach Fest, and has sponsored the Leipzig Zoo<sup>297</sup>. Through these actions, Veolia aims to take part in different projects in the city in order to improve its image. The fact that the company is engaged in more than 30 projects — primarily in Eastern Germany — and is cooperating with 22 municipal authorities in Saxony for the water supply and with 11 of them for water sanitation<sup>298</sup>

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<sup>296</sup> LVZ, Leipzig bietet beste Bedingungen, 06.12.2005, p.10

<sup>297</sup> LVZ (Tappert, A.), Französischer Konzern will 49,9-Prozent-Anteil erwerben, 17.11.2006, p.13

<sup>298</sup> LVZ, OEWA hat Wurzeln in Sachsen, 06.12.2005, p.11

also represents direct competition for KWL, which wants to become a regional actor in the water sector.

In parallel to the growing private activity in Saxony, the liberalization of the energy sector in the late 1990s and the European Commission's threat to break up the local water monopoly pushed the utility to react and adapt its organization, but no collaboration with private actors was on the agenda.

*“In einer Zeit intensiver Diskussionen über Liberalisierung und Privatisierung der Wasserwirtschaft ist die Unternehmensstrategie der Kommunalen Wasserwerke Leipzig GmbH darauf ausgerichtet, in diesem Prozess aktiv zu handeln und die Entwicklung zu einem modernen, wirtschaftlichen und wettbewerbsfähigen Versorgungsunternehmen zügig zu gestalten.” (KWL annual report, 2001: 6)*

KWL managers took several measures to cope with the threat of a future liberalization of the water sector, but always with the belief that relying on a private partner to conduct this change was unnecessary. The aim of this reorganization was to make KWL more employee- and customer-oriented, and more cost-efficient (LC5). Although both former KWL managing directors claimed that they could imagine working with private joint partners if it was justified, no privatization project was planned yet<sup>299</sup>. According to the technical director and VKU vice-president of the time, “a public monopoly, under democratic control, is better than a private monopoly<sup>300</sup>”.

In the mid-2000s — the period of privatization debates in Leipzig's urban services — the belief in the private alternative as a solution to cope with management and organization problems has become weaker among local decision-makers. Private water operators did not expand their activity in Germany, as they had once expected, and the debates on water liberalization at the European and national levels had made little progress. However, a call for tender in the energy sector with a possibility of collaboration at the level of the holding represented an opportunity for operators interested in expanding their business in Germany. The French company Veolia thus participated in the competition for the SWL bid. The operator claimed their interest in a long lasting cooperation with the municipality in the local press<sup>301</sup>.

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<sup>299</sup> LVZ (Tappert, A., Teske, H.), Aussichtsreich, 04.05.2006, p.13

<sup>300</sup> LVZ, Wasser - ein kostbares Gut, 05.12.2006, p.13

<sup>301</sup> LVZ (Boss, T.), Christophe Hug wirbt mit dezentralen Strukturen, 25.04.2007, p.7

For that bid, they even created the company Veolia Stadtwerke GmbH (PO2). For several local decision-makers, Veolia had won before the start of the bid, since it was the only operator that was able to manage all the urban services<sup>302</sup>.

In addition to Veolia, a great number of potential partners, from various countries and with different core businesses, competed for the bid<sup>303</sup>. Among the bidders, only four went to the final round: Veolia, Enbw, GdF and Electrabel<sup>304</sup>. In order to increase its chance, Enbw entered into a consortium with the public transportation company from Britain, Arriva. Moreover, Enbw made its regional roots strong for the cooperation. Veolia demonstrated its competencies in the management of environmental tasks, using its participation in the ownership of various utilities. Although Veolia was seen as the favorite partners by the consulting group KPMG, the steering committee chose Gaz de France as private partners since Veolia made the lowest offer among the four finalists, at €375 million<sup>305</sup>.

*“GDF hatte 520 Mill. Euro für 49%, dazu ein paar andere Dinge. Sie wollten in Kultur investieren und bestimmte Gasmengen zu Vorzugspreisen abgeben etc. Das war natürlich eine Riesensumme, das hatte niemand erwartet. Wir hatten kalkuliert 300–350 Millionen als Obergrenze. Und da ging es sofort mit der Fantasie los, was wir mit dem Geld machen könnten. Das sah so aus, als ob es für den Bürgermeister die Befreiung wäre.” (LC2)*

Although Gaz de France made the highest bid and therefore won the contract, the privatization process was stopped by the citizens' initiative.

#### *Systems effects following the reforms of the urban services*

The reforms of urban services conducted in Leipzig have had several consequences on the governance of water services. First, integrating services into LVV enabled the municipality to reduce the deficit made by public transportation and to leave the local government more scope of action on the pricing policy of urban services. However, this integration did not enable the holding to balance the whole deficit of LVB and KWL with the profits of SWL, at least during the first

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<sup>302</sup> LVZ (Tappert, A.), Jung, SPD und CDU wollen Stadtwerke und LVV verkaufen, 01.11.2006, p.15

<sup>303</sup> LVZ (Boss, T.), 22 Interessanten für Leipzigs Stadtwerke, 15.05.2007

<sup>304</sup> LVZ (Staubert, K.), Stadtwerke-Verkauf: Vier endgültige Angebote, 30.10.2007, p.17

<sup>305</sup> LVZ, Oberbürgermeister favorisiert Gaz de France, obwohl andere Bieter viel Besser zu den Stadtwerken passen, 15.12.2007

years following the creation of LVV. In addition, LVV attempted to develop its activities in areas beyond public services, such as data management. Although KWL's strategy remained generally focused on the water services in Leipzig and the surrounding area, the utility encountered financial problems caused by a leasing arrangement with a US investor. Lastly, despite the failed attempt at privatizing urban services in 2008, debates between proponents and opponents of the privatization have continued.

Vicious circles: Integrating urban services into one enterprise was already suggested during the period of foundation of KWL but did not occur for two reasons. First, even in the period following Reunification, urban utilities were managed independently from each other. The process of property transfer took place in different ways and at different paces depending on the sector. Second, the cooperation with ZVWALL impeded the integration of the water services with other services into one utility. The integration of the urban services into a holding was nevertheless implemented in 1998. The aim of this reform was to reproduce a *Stadtwerke* organization and be able to rely on cross-subsidies by balancing the public transportation deficit with the energy utility's profits and partly with the profits of the water utility<sup>306</sup>. The holding was expected to bring citizens better services — that is, better quality with lower prices<sup>307</sup>. Through this construction, the municipality aimed to unify the strategy of the utilities and exert better control over them. The vote on February 2, 1997 was obtained with a large majority and without considerable debate. However, LVV's board of directors encountered difficulties in meeting the expectations of the local authorities. First, despite the expected synergies between the utilities and the use of cross-subsidies, the profit generated by SWL could not cover the deficits of both KWL and LVB. In 1999 for instance LVV had a deficit of €64 million and still had to make its investments by relying on the municipal budget or loans<sup>308</sup>. Moreover, in this period, SWL was still partially owned by MEAG (an RWE subsidiary), which therefore reduced the profit for LVV. In 2003, LVV took a loan and bought back MEAG's shares for €199 million<sup>309</sup>. Second, the LVV management did not succeed in controlling the strong management

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<sup>306</sup> LVZ (Tappert, A.), Leipzig muss kein Geld Zuschüssen, 01.07.2004, p.13

<sup>307</sup> LVZ (Orbeck, M.), Parlament genehmigte Stammkapital für Gesellschaft, 20.02.1997, p.13

<sup>308</sup> LVV, annual report, 1999, p.13

<sup>309</sup> LVV, annual report, 2003, p.46

boards of the utilities, which had been independent since Reunification, and could not avoid conflicts between them. For instance, the KWL management board did not support the creation of the holding because they would lose their independence and saw this reform as the first step toward an integrated utility (LC9). Although the creation of the Holding LVV led to more interdependence between the various urban services, the independent development of each utility during eight years had left each board of direction enough independence.

*“Diese Holding hat sozusagen jetzt in Leipzig immer starke Geschäftsführer gehabt (...), und jetzt sind sozusagen diese starken Geschäftsführer der LVB, SWL und KWL, die haben nur gegeneinander gekämpft. Also diese LVV versucht immer rein zu regieren und sie wehren sich dagegen, d.h., das ist eine Blockade, das bringt die Unternehmen nicht weiter.” (LC7)*

Following privatization's failure, LVV was at the center of heated political debates. First, since the municipality did not obtain the expected financial resources from the privatization, namely €520 million, the CDU party, the mayor, the state administrative authorities, and the finance deputy mayor, claimed that LVV had to enhance its financial contribution in order to cover the municipal financial deficit<sup>310</sup>. Second, in October 2008, LVV was mandated by the municipality to reinforce its control over its subsidiaries<sup>311</sup>. More employees had to be hired for the holding and the board of directors would take part in KWL, SWL and LVB's strategic decisions, and control their investment and financial planning. Moreover, they were intended to become chairman of each subsidiary's supervisory board. The reform was therefore expected to lead to a reduced independence for the utilities.

The tension between contradictory goals: The source of the growing conflicts between the goal of public duty and of profit-making could be identified at the holding's level. Following its foundation, LVV became an economically powerful company with a network made up of 170 utilities active in Leipzig and the region, and with the clear aim of becoming a competitive multi-utility<sup>312</sup>.

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<sup>310</sup> LVZ (Staubert, K.), Bonew mahnt Reformen in Stadtfirmen an Haushaltskonsolidierung, 12.08.2008, p.16

<sup>311</sup> LVZ (Staubert, K.), Stadtrat beschließt erstmals Eigentümerziele für kommunale Unternehmensgruppe, 16.10.2008, p.18

<sup>312</sup> LVZ (Tappert, A.), Kommunale Firmen treten auf dem freien Markt immer aggressiver auf, 09.11.2004, p.13

*“Synergien nutzen und Wirtschaftlichkeit steigern—mit diesem Ziel wollen die LVV-Unternehmen ihre gemeinsamen Aktivitäten ausbauen. Auch durch Kooperationen mit anderen kommunalen und privaten Partnern zur Erschließung neuer Geschäftsfelder und zum Ausbau des Umlands- und Auslandsgeschäftes soll die Wettbewerbsfähigkeit auf den liberalisierten Märkten gesichert werden.”*  
(LVV, annual report, 1999: 17)

The holding became increasingly large and powerful, but the rise of its profits was correlated with an increase in water and energy bills. Furthermore, CDU and FDP members of the city council denounced LVV's growth as leading the city council to lose its control over municipal urban services<sup>313</sup>. Moreover, it was argued that these utilities were distorting competition with local enterprises which delivered the same service as the sub-subsidiaries, such as telecommunication, data management, construction, logistics and transportation, to name but a few<sup>314</sup>. In 2004, a CCI report denounced the development of Leipzig's utilities as blocking the activity of private enterprises and undermining competition in various sectors. Defending the position that such a company was advantageous for municipal employment and more generally for the local economy, the LVV CEO suggested the creation of the Leipzig AG in 2005<sup>315</sup>. This would have allowed the three distribution enterprises to embark on an expansion strategy by 2008. However, the city council did not support this project, which was assessed as too costly and too complicated.

In accordance with state regulation, KWL's strategy remained essentially oriented toward the management of water services at the local and regional level. The utility also attempted to develop at the national and international level and to diversify in order to generate profits. In 2000, the subsidiary *Sachsen Wasser* was created with the purpose of developing a business at the national and international levels<sup>316</sup>. Its activity has been limited to non-investment businesses, however — that is, technical cooperation and management consulting — because the State of Saxony's regulation does not allow the expansion of local monopolists' businesses

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<sup>313</sup> In 1998 the LVV owned 4 subsidiaries and 15 sub-subsidiaries. In 2003, the number of subsidiaries decreased to 3 but the number of sub-subsidiaries increased to 49. In 2005, LVV owned 52 sub-subsidiaries (LVV, annual reports, 2004; 2005; 2006).

<sup>314</sup> LVZ (Tappert, A.), Energie, Wasser, Verkehr - stadteigene Firmen dominieren das Wirtschaftsleben an der Pleiße 15.09.2004, p.21

<sup>315</sup> LVZ (Tappert, A.), Keine Privatisierungen vorgesehen. 14.03.2005, p.11

<sup>316</sup> LVZ (Seidler, T., Tappert, A.), Chefs der Kommunalen Wasserwerke antworteten in der LVZ-Lokalredaktion auf Fragen zu Gebühren, neuen Geschäftsfeldern und alten Rohrleitungen, 24.07.2002, p.16

outside their local area (LC5; LC9). The business developed by *Sachsen Wasser* at the national and international levels had no impact on the local water services in Leipzig. Relying on their specific organizational structure, the utility has sought to become an important actor at the regional level<sup>317</sup>. According to the former technical manager, the aim was to become a successful model for cooperation between municipalities. Their business model was not based on the takeover of facilities in other cities but on their integration into the ZVWALL. This cooperation at the regional level, supported by the environmental ministry of Saxony, was expected to create economies of scale and therefore reduce the price of water.

During the 2000s, KWL's management board also adopted new ways of financing infrastructure<sup>318</sup>. In 2000, the management board decided to carry out a cross-border leasing<sup>319</sup>. KWL rented four waterworks to a US investor for 19 years. This transaction brought between €10 and €15 million to the utility. In 2002, new leasing contracts with US investors were planned for around €70 million<sup>320</sup>. Through these CBL the utility intended to invest in the infrastructure and maintain the water prices at a stable level. The municipality was expected to get a part of the profit. In March 2003, the state administrative authorities allowed KWL to conduct a new CBL on Leipzig water distribution network for an estimated value of €12.5 million<sup>321</sup>. In 2004, the KWL relied on a credit default swap<sup>322</sup> (Henceforth CDS) with different banks, which had reached negative current values by the end of the same year. In 2006, the KWL management board conducted a collateralized debt obligation<sup>323</sup> (Henceforth CDO) with the UBS bank for a volume of €290 million. For that transaction, KWL obtained €40 million from the bank. *"Zur Optimierung der Transaktionen der KWL wurde im Jahr 2006 ein Kreditsicherungsderivat mit der*

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<sup>317</sup> LVZ (Milde, U., Tappert, A.), Wasserwerke wollen wachsen, 12.09.2006, p.16

<sup>318</sup> LVZ, US-Investoren bei Klärwerken eingestiegen, 14.07.2000, p.13

<sup>319</sup> A cross-border leasing is a transaction where a company rents the use of fixed assets for a certain amount of years in exchange of tax deductibles payment. Because both partners are in different countries, this transaction enables them to benefit from tax allowance, whose profit (around 10% of the transaction volume) is then divided between both partners.

<sup>320</sup> LVZ (Müller, T.), Stadt bereitet Verträge für Anlagen der LVB und der Wasserwerke vor, 23.10.2002, p.15

<sup>321</sup> ZfK, Kommunale Wasserwerke Leipzig GmbH, October 2006, p.6

<sup>322</sup> A Credit Default Swap is an agreement between two partners, a CDS seller who agreed to play the role of insurer toward a defined bond of reference, and a CDS buyer who paid regularly fees to the seller in exchange for the insurance until the end of the agreement if the bond of reference does not default. If the bond defaults, the seller has to pay compensation to the buyer and buy the bond.

<sup>323</sup> A Collateralized Debt Obligation is a package of bonds, loans and debts with various levels of risk. Such an instrument is generally used in order to reduce the risk of loss due to default. The returns on CDO are paid by banks to the investors depending on the level of risks they have acquired.

*UBS abgeschlossen*<sup>324</sup>. In December 2009, KWL had to pay €20 million back because of the CDO. Following that, the municipality dismissed both KWL's managing directors and sued UBS, which in the meantime requested, together with other banks, the municipality of Leipzig to pay around €290 million. This financial scandal considerably damaged the reputation of KWL but did not result in new debates on privatization, as members of the APRIL network might have expected<sup>325</sup>.

Conflict escalation: In parallel to the urban services' reform, the APRIL network emerged. This contributed to influencing and monitoring the future development of Leipzig's local public services. Due to the network's intervention the privatization project was aborted and the urban services remained in the hands of the municipality. Through this success, the APRIL network gained a significant reputation among the local population and decision-makers. Following the citizen decision, the members of the APRIL network have continued to organize or be involved in workshops, conferences and podium discussions about the dangers of privatizing municipal services. The city of Leipzig was also regarded as a model to follow by various citizens' initiatives throughout Germany. In addition, proponents of change became aware that conducting a reform would be difficult in Leipzig because of this network of local actors. Hence, even if the city council would accept a cooperation with a private partner and would run a call for tender, the APRIL network would most likely try to prevent the partial privatization process by relying on a new citizens' initiative (PO9). They thus contributed to making Leipzig's public services a hazardous business for private operators.

As a result of the reform however, the mayor did not obtain the financial resources he had expected for the city. Moreover, the organization of the bid cost several millions to the municipality. The privatization of Leipzig's municipal services was forbidden during the five years following the citizens' initiative of 2008. However, the debates on privatization were pursued and a sale of municipal properties was still at the top of the political agenda. In November 2008 for instance, during a podium discussion on "the future of Leipzig's municipal utilities", several proponents of privatization (in this case the director of the CCI and the former

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<sup>324</sup> KWL, annual report, 2006, p.54

<sup>325</sup> LVZ (Staubert, K.), April-Netzwerk warnt vor Privatisierung, 11.03.2010, p.17



Leipzig deputy mayor for economic affairs) criticized the action of the APRIL network as only driven by ideologies<sup>326</sup>. They argued that publicly managed municipal utilities were not always close to the citizens, and that private enterprises could work in closer relationship with them. The state administrative authorities kept exerting pressure on the mayor to make him reduce the municipal deficit<sup>327</sup>. In response, the mayor already started preparing a new project of privatization of urban services in 2011, and specifically put the privatization of two subsidiaries of SWL and KWL on the agenda: Perdata and Wassergut Canitz, specialized in the sustainable development of agricultural production. Several years after the success of the initiative, the APRIL network tried to deter the municipality from restarting a privatization process, by relying on the argument that since it had already failed once, there was no reason to believe it would succeed at the next attempt<sup>328</sup>.

#### *Summary of the case*

The case of Leipzig has been marked by a strong continuity in ownership of its water services since the 1990s, although several factors could have led the municipality to privatize water services early after Reunification: the absence of integration between the services and the absence of cross-subsidies, the absence of state regulation in the beginning of the 1990s, and the important need for investments in infrastructure. Even though private operators were interested in taking over the management of water services in Leipzig, local decision-makers have never relied on a private partner to reorganize water services. Besides keeping the ownership of water services in public hands, KWL carried out several organizational changes and was integrated into a holding with energy and public transportation services at the end of the 1990s. In 2007, the privatization of urban services was put on the political agenda in order to cope with the budget deficit. Despite the vote of the city council this reform failed following a citizens' initiative. Focusing on this last attempt to reform Leipzig's urban services, the action of a strong coalition of actors against the

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<sup>326</sup> LVZ (Tappert, A.), Experten diskutieren über die Zukunft von Leipzigs Stadtfirmen, 08.11.2008, p.18

<sup>327</sup> LVZ (Staubert, K.), Bonew mahnt Reformen in Stadtfirmen an Haushaltskonsolidierung, 12.08.2008, p.16

<sup>328</sup> APRIL Network, Diskussion über „Privatisierungsbremse“ eröffnet - APRIL gibt Anstoß zur öffentlichen Debatte über zukünftige Privatisierungsentscheidungen, Press release, 17.08.2012

reform could be identified. First, during the agenda-building phase of public service privatization, no real consensus could be found between the reformers. Some wanted to sell a majority of the shares of all utilities inside the LVV. Others sought to sell a minority of SWL. The organization of a network of local stakeholders that strategically acted against the reform was a decisive factor for stopping the privatization. Also, over the years, no strong collaborations with external actors were developed, which might have facilitated a rupture. The actors generally perceived a private partnership as a threat to governance of urban services, including water. Last, the integration of urban services and the privatization attempts have had several consequences on Leipzig's urban services. While the integration into LVV made the use of cross-subsidies possible and reinforced the interdependence between the utilities, it also resulted in coordination problems between the holding and its subsidiaries, and in problems with the balancing of profits and deficits between the utilities. The holding was also criticized for expanding its activity into additional businesses that were not part of the urban services. KWL also relied on hazardous financial arrangements that did have important economic consequences on the utility and the municipality (financial crisis through CBL). The failure of the privatization process resulted in new debates between proponents and opponents of a privatization and crystallized the issue of privatization of public services in Leipzig. On the one hand, the state administrative authorities exerted pressures on the local government in order to make it cope with its budget deficit. On the other hand, the APRIL network threatened to organize a new citizens' initiative if the municipality decided to privatize again.

## **Chapter 7: A comparative analysis of the three cases**

The purpose of this chapter is to systematically compare the three cases described in the previous chapter and to discuss the factors that contributed to shaping different path developments at the local level. These three cases were examined in line with our theoretical framework. First, the overall trajectories of the organizations under scrutiny and the reforms underlying the organizational changes are compared. Second, the comparison is structured along the three themes that contribute to explaining the variety of organizational changes across the different local settings: the influence of path-dependent mechanisms, the strategy used by actors in order to deviate from the established path and the influence of systems effects following a change attempt.

### **An overall comparison of the organization of water services**

This first section aims to compare the organizational development of water services in the three municipalities. First, the organizational patterns that changed in the water services of each municipality are compared. In a second step, the various categories of reforms that drive these changes are studied.

#### *A comparison of organizational changes over time*

An overall comparison of the three cases shows that during the 1990s, all municipal utilities carried out similar changes in their functioning. These changes were first characterized by a process of corporatization — that is, the transformation of a municipal utility into a more independent enterprise, generally under private law. In Frankfurt, the utility's transformation into a limited liability company in 1995

and then into a joint-stock company in 1998 took place in a broader context of public services modernization. In Leipzig, this transformation was not only the decision of local decision-makers but also of the THA. In contrast to Frankfurt and Leipzig, BWB was transformed into a public corporation in 1994 and therefore remained under public law. In this case, the public form was maintained in order to preserve the water sanitation business unit from being subject to corporate taxes. In general, change in the corporate status allowed the utilities to increase their economic scope of action and political independence from the municipality and state regulation.

Following the corporatization, the three utilities obtained more leeway to conduct further changes, which were legitimized by boards of directors as a prerequisite for becoming more competitive and cost-effective. The main purpose was to reduce the cost of production in order to maintain stable prices for the population while being capable of dealing with infrastructure investments. For that purpose, the utilities implemented various internal changes characterized by a reduction of hierarchies, the introduction of a process orientation, the formation of cost and profit centers, and outsourcing. In the first place, rationalization programs contributed to a decrease in the number of employees. In Frankfurt, a reduction of over 1,000 employees took place following SWF's corporatization. In 1998 Mainova had 3,500 employees; it had 2,971 in 2001. A similar strategy occurred in Leipzig after the appointment of a new board of directors in 1997. This reorganization resulted in a progressive decrease from 777 employees in 1999 to 580 in the middle of the 2000s. In Berlin, after the change into a public corporation in 1994, a similar process took place. BWB had 7,552 employees in 1994, and still had 6,633 before the partial privatization. In general, cost reduction programs were also accompanied by changes in water prices, such as in Leipzig, where the managing directors introduced a new price calculation in the end of the 1990s that resulted in a water price increase, and by the use of leasing arrangements, such as in Leipzig with the CBL, or in Berlin, where BWB also relied on leasing for two of its sewage works.

Moreover, the change in the legal framework gave the utilities the possibility to create subsidiaries and expand their businesses outside their local area or in new sectors. While these utilities conducted similar processes of reorganization, their strategies of differentiation diverged. In Frankfurt and Leipzig, both utilities have aimed to become important regional players. In Frankfurt, becoming regionally

active in water distribution progressively emerged as a political issue during the middle of the 1990s. With Hessenwasser, Mainova has been able to cooperate with other local utilities. Hessenwasser has become Hesse's largest water supplier. At the international level, Mainova's activity is unexciting and the state regulation would have impeded such a business expansion. The utility also increasingly expanded its activity at the regional level by taking shares in various businesses such as major participation in gas suppliers (Gasversorgung Main-Kinzig GmbH; Oberhessische Gasversorgung GmbH) or by acquiring minor participation in the shareholding of other municipal utilities (Eisenacher Versorgungsbetriebe GmbH; Stadtwerke Hanau GmbH). Furthermore, with Thüga's takeover in 2009, Mainova increased its business at the national level. Besides focusing on the municipal water services, KWL has also sought to become a major regional actor. This regional activity was made possible by ZVWALL. Through the association of surrounding cities, KWL also expanded its activities by acquiring shares of other municipal utilities. Moreover, KWL has become active at the national and international levels through Sachsen Wasser, a subsidiary founded in 2001. While this subsidiary contributed to KWL's positive results, its activity has remained limited to non-investment businesses, such as consulting, management contracts, or technical cooperation, because of the state regulation of Saxony. In contrast to Mainova and KWL, BWB clearly aimed to expand its business not only at the regional level but also at the national and international levels. This move started directly after Reunification through the cooperation with municipalities in the region of Brandenburg, in Eastern Germany, and in Eastern Europe. Progressively, the utility established cooperations with private operators at the international level and started to participate in the takeover of municipal water utilities worldwide. BWB also created a great number of subsidiaries in and outside its core business, such as BerliKomm or SVZ Schwarze Pumpe.

#### *A comparison of the policy reforms*

In the three municipalities, the local governments voted on various types of reforms directly or indirectly influencing the water services. Two types of reforms can be distinguished. The first type of reform integrates urban services in order to create synergies and rely on cross-subsidies. This kind of reform is generally more

easily accepted by local decision-makers since it enables them to keep the control over the public distribution services and to finance the activity in deficit without having to privatize. Integrations of water services with other urban services were observed in Frankfurt and Leipzig. In 1998, the merger between Maingas and SWF reinforced the integration of urban services. Although this reform resulted in the participation of a private partner in the utility's shareholding, this operator has only been a minority shareholder. The municipality has remained in control of the utility since the private partner obtained no blocking minority in exchange for financial compensation. The integration of the Leipzig water utility with other services took place in 1998 through the creation of the holding company LVV. This reform, which was widely accepted among local stakeholders, was a project that the first Leipzig mayor had already sought to implement directly after Reunification. Like in the case of Frankfurt, this reform contributed to shaping Leipzig's services into an integrated municipal multi-utility and reinforcing the interdependence of the various urban services. The municipality was thus able to partly offset the deficit of public transportation.

By contrast, the second type of reform implied a cooperation with a private partner, which obtained a part of the ownership of the water utility. This kind of reform represents a greater source of uncertainty for local decision-makers since they do not have total control over water services. It is characterized by the organization of an international call for tender and may lead to a partnership with external actors, such as multinational corporations. In Frankfurt, several local decision-makers wanted to establish a partnership with a private company by selling shares from the utility. However, the city council did not approve this project and decided to merge the utility with Maingas. In Berlin, the local government decided to rely on an international call for tender in order to select a future partner for BWB. It decided to sell 49.9% of BWB's shares and accepted the loss of full control over the utility. Through this partial privatization, the local government made a financially profitable deal, but partly relinquished its authority and competencies in matter of water management. Moreover, it formed a partnership with a private partner, whose goal and interests may with BWB's public duty. In Leipzig, the municipality decided to conduct a reform in 2005, based on an international call for tender. Through this approach, the municipality first aimed to find a partner for the energy utility and sell

up to 49% of its shares. After that, it planned to sell up to 25% of the holding through a new international call for tender. However, the reform sparked off strong reactions from local stakeholders against a partial privatization of municipal services which failed.

In sum, local governments may rely on various strategies in order to reform their water services: they may decide to keep the full property of the utility and just conduct minor incremental changes; they may sell a part of the utility while retaining control over it, or they may sell the majority or even all the utility and in this case relinquish the control over local water services, as well as the financial returns generated by the activity. In order to conduct these various reforms they had the possibility to rely on an international call for tender or to directly negotiate with an operator without relying on a competition.

	<u>Path maintenance (Leipzig)</u>	<u>Path inflection (Frankfurt)</u>	<u>Path-breaking (Berlin)</u>
<b><u>Nature of change</u></b>			
<i>Management practices</i>	Corporatization, rationalization programs, sources of financing, creation of subsidiaries	Corporatization, rationalization programs, sources of financing, creation of subsidiaries	Corporatization, rationalization programs, sources of financing, creation of subsidiaries
<i>Utility ownership</i>	Under municipal control	Under municipal control despite minority shareholding	Under partial control of private shareholders
<i>Utility strategy</i>	Focus on local and regional businesses (through ZVWALL)  Limited international activity (Sachsen Wasser)	Focus on local and regional businesses (through Hessenwasser)  National activity with Thüga	Focus on competition and international businesses (through BWI) in parallel to the local water business
<b><u>Nature of the reform</u></b>			
<i>Integration of urban services</i>	Accepted by the city council	Accepted by the city council	Rejected by the local government
<i>International call for tender</i>	Stopped by citizen's initiative	Rejected by the city council	Accepted by the local parliament

**Table 17 : A comparison of the organizational changes and reforms across the three cases**

## **The mechanisms structuring the water services**

In this section, the mechanisms structuring the water services are compared. As was already pointed out, German water services are long-lasting systems that are highly embedded in a local context through rules and standards, strong interrelationships as well as important sunk costs. Three observations are derived from the comparison of the three cases at the local level: First, the coordination between actors, the organizational and institutional complementarities and the investment spirals that structure each of these systems have varying effects depending on the case. Second, the influence of these mechanisms also evolves over time in each case. Last, the reliability of water services, organized as a utility fully owned by the municipality, has been debated in a context of a major municipal financial crisis when the need to cope with the municipal deficit was put at the top of the local political agenda.

### *Variation in the influence of mechanisms across local settings*

First, water services were marked by different degrees of integration with other urban services in these three cases. Integration between urban services associated with the use of cross-subsidies represents an important barrier to privatization, since balancing the deficit of one business with the profits of the others is not in the interest of a private operator. In Frankfurt, integration unfolded progressively during the 20<sup>th</sup> century and water distribution was already integrated with electricity and public transportation services into one utility in the beginning of the investigation. The gas distribution, the water sanitation and waste disposal were managed by distinct organizations. In contrast to Frankfurt, water services in Berlin and Leipzig were managed independently from the other services. While the integration of water sanitation and distribution provided the utility with several synergies, local government in both cases did not have the possibility to use cross-subsidies. Consequently, they had less leeway to influence the prices of urban services than in the case of Frankfurt. While in Leipzig the independent management of water services was the product of the GDR period, in Berlin these services have been managed independently from the other services since the beginning.



Second, the interrelationships between the central actors governing water services — that is, the local government and the utility managers — differed across cases. In Frankfurt, the state regulation of Hesse strongly impacted the interdependence between the local authorities and the utility. Moreover, the legal form of the utility as a municipally owned enterprise enabled the local government to keep close political control over the utility's daily business. In Leipzig, Reunification resulted in an absence of a regulative framework, at least for the first three years, and the interrelationships between local decision-makers were not influenced by state regulation during this period. Instead the THA had an influence — though limited — on the organization of water services and the relationships between the local stakeholders. The utility also had more leeway than in the case of Frankfurt for two reasons. First, its legal form as a limited liability company gave the utility's management more political independence from the local government. Second, the local government control over the utility was also weakened by the association of surrounding cities (ZVWALL), which also exerted a control over the utility's business. In Berlin, the interdependence between actors was dominated by the local government. First, the senate is the upper government body both for the city and for the state and is directly involved in the rule-making that influences local water services (Pahl-Woslt, 2009: 356). Second, like in Frankfurt, the utility was a municipally owned company in the beginning of the 1990s and therefore highly dependent upon the local government.

Last, water services were affected in different ways by the need for investment in infrastructure. In Frankfurt, this task did not represent an important issue. In this case, these investments remained constant and were carried out by the local actors. Moreover, the utility was not directly confronted with more cost-efficient alternatives supported by private actors, such as in East German municipalities. In the two other cases, the utilities had to make huge investments in infrastructure. In Berlin and Leipzig, municipalities and the water utilities had to deal with important investments in order to replace and maintain the infrastructure that had been neglected under the GDR regime. This situation weakened the local actors that are usually a monopoly and made the situation easier for private investors to develop their activity in the region and to suggest competitive technical and managerial alternatives.

*Evolution of the mechanisms over time*

In addition to this variation across cases, the interdependence between the services, the rules governing the actors, and the need for investment in infrastructure evolved over time in each case. In Frankfurt and Leipzig the integration of water services with other services occurred during the 1990s in order to face municipal budgetary problems and to cope with the deficits without raising the prices of the services. In comparison to these two cases, Berlin water services were not integrated with the other urban services. To local decision-makers, integrating services would have given too much power to the utility's management. Furthermore, the water utility was large enough not to rely on cross-subsidies.

Actors also undertook changes in the legal form of the utilities (corporatization) with the aim of giving the utilities more independence from local government control and state regulation. This change in the utilities' legal forms also influenced the interrelationships between the utility's management and the local government. Through this, the local government aimed to give the utility more independence in order to control its deficit and to ensure affordable services for the citizens. In Frankfurt, the first step was taken in 1995 by changing the utility into a limited liability company, and the second step in 1998 by transforming it into a joint stock company. Under this form, the local government had no more control over the utility's daily business. In Leipzig, the corporatization was already orchestrated by the THA and was maintained thereafter. In Berlin, the utility's public legal form was maintained because of the pressures from the trade union, and because the water sanitation could remain tax-free. Its transformation in 1994 into a public corporation secured the advantages of the public form while enabling the management to gain in political independence. In all cases, these changes in the legal form opened up the possibility to invest in other businesses — as with telecommunications in Berlin — rely on alternative sources of financing — as with cross-border leasing in Berlin and Leipzig — or develop, albeit in a limited way, a business outside the local frontier, as in Leipzig with Sachsen Wasser, in Berlin with BWI, or in Frankfurt with Hessenwasser.

Finally, investment in infrastructure represented an important endeavor in Leipzig and Berlin because of the impact of Reunification. In these two cases,

investments were not covered by the utilities' profits, at least in the beginning. In both of these cases however, the utility could at least partially cope with investment needs over the years through water price increases or cost reduction strategies.

*Municipal financial crisis as a trigger for privatization*

Generally, municipal water services have been stabilized through the influence of a system of rules, resources and interrelationships. In a context of serious municipal financial crisis, however, the stability of this system seems to have been threatened by actors who aimed to sell a part of the municipal public services.

In the three cases, the increasing debts of the municipality were the main reason for the local government to put the privatization of water services, and other services, on the political agenda. In Frankfurt, the discussion about a privatization emerged in 1993-1994. In the first half of the 1990s, the municipality experienced important financial problems. The state administration forbade the municipality to further increase its deficit and pushed it to carry out a consolidation of the municipal budget in order to reduce its debts. In Leipzig, the municipal debts have steadily risen since Reunification to reach €911.6 million for the year 2004–2005. Following this peak, the debates on privatization of the municipal enterprises started. In contrast to the other cases, the financial issue of Berlin was much more important during the privatization debates. This situation got worse during the middle of the 1990s when the German government stopped subsidizing Berlin's budget. Although the debates on privatization emerged during a period of financial crisis in all three cases, it is thus important to stress that the financial situation of Berlin was much more serious than in Frankfurt and Leipzig and came more suddenly due to the ending of subsidies coming from the federal state.

Local decision-makers generally consider municipal urban service utilities as central drivers of the municipal economy. In a context of municipal structural deficit, pressures were therefore exerted on these utilities as they usually have to contribute to covering the financial deficit of the municipality. In Frankfurt, the high deficit of the utility, mainly due to public transportation, was said to hinder the consolidation of the municipal budget. In Berlin, the local government exerted pressures on BWB by increasing yearly the interest rate on the utility's capital. In Leipzig, the state

administrative authorities also criticized the debt of the utilities (and above all SWL) as being a barrier to addressing the financial crisis of the municipality.

Across the three cases, different local actors seized the problem of municipal finance in order to suggest a privatization of urban services. In Frankfurt, the project of privatizing the utility was developed by the deputy mayor for finance. In Leipzig, the project was put on the political agenda by the mayor. In Berlin, privatizing the water services was the program of the finance senator and the economic senator. In all cases, these actors aimed to impose a solution that might break with the established model of urban services as a local and public monopoly. Taking such a decision might have had a significant impact on the interrelationships between local actors involved in these sectors and the rules governing their interactions. It might have resulted in the introduction of private operators in the local policy, weakened the influence of the local government and the utility in the policy process, and reduced the profit generated by the cross-subsidies.

### **Actors' strategies during the privatization process**

Actors' constellations play an important role in the reform of water services and in the explanation of a variety of changes across local setting. The cross-case comparison shows that the impact of actors on a reform depends first on the constellation of actors, and especially the power distribution among these actors, second on their openness to privatization solutions, and third on the strategies that specific actors inside the constellation put in place in order to conduct or challenge the reform.

#### *The power distribution across local cases*

Across the three municipalities, it was possible to observe a clear distinction in the constellation of actors and in the distribution of power among the local stakeholders directly or indirectly involved in the water services. A simpler constellation of actors, with the power in the hands of few actors, seems to be a better prerequisite for a reform than a constellation of actors where power is distributed among a great number of stakeholders.

In Berlin, power was concentrated in the hands of the senate for finance and the senate for economic affairs. First, Berlin's local government had more scope of action to propose a privatization model since it was not constrained by higher order regulation as in Frankfurt and Leipzig. As was stated by interviewees, the senate could change the regulation to adapt it to its own model. Second, the local government could take advantage of the utility's poor management, above all with regard to the huge deficits made by several of its subsidiaries. At this time, the utility's management was strongly criticized for investing in hazardous businesses at the expense of the local water services. During the debates on privatization, managers were also excluded from the decision-making process, and the senate took technical advice from external consultants to conduct the privatization.

In Frankfurt, the situation was slightly different. First, the local government was constrained by the Hesse Water Act, especially the § 39, which regulates the procedure and degree of privatization of local water services. While the utility had a important deficit during the debates of privatization, the utility's managers profited from a good working cooperation with the gas utility and the good relationships with the mayor, both of whom were opposed to the privatization project of the deputy mayor for finance. Through their relationship with the mayor, the utility's managers were not excluded from the decision-making process and contributed to the formulation of the integration project that was endorsed by the mayor.

In the case of Leipzig, the power relationship between the central actors was in favor of the utility's managers. As in Frankfurt, local government was constrained by the Saxony Water Act, § 57. The utilities' managers did also take part in the privatization debates. By contrast to Frankfurt however, KWL was perceived by the local stakeholders as a successful utility, which was able to address the major investment needs following Reunification and was highly involved with the local community. This situation granted an influential position to the utility's managers during the decision-making process. Furthermore, the local government could not decide alone but needed the endorsement of the association of surrounding cities, which ran counter to a partnership with a private operator.

In addition to these specific interdependencies between the local government and the utility's management, peripheral actors also influenced the power distribution and played a crucial role in the decision-making process. In Berlin, the trade union of

public services had a great deal of influence on the reform and the local government would not have dared to make a decision without its endorsement. However, with the exception of the trade union, no other actors were directly involved in the decision-making process in Berlin, which primarily remained a matter for the local government. Civil and environmental associations did not take part in this process. In Frankfurt, the decision-making process also remained largely in the hands of the local government and the utility's managers. Neither the trade unions nor any civil or environmental associations were identified as having had a significant role in the debates on the utility's reform. In contrast to these two cases, Leipzig was marked by the involvement of several actors outside the local government during the privatization process. First, the trade union exerted pressures against the local government in order to stop the privatization. Second, the APRIL network played a decisive role and succeeded in involving the citizens in the decision-making process. In the case of Leipzig, power was more extensively diffused across actors than in the two other cases.

#### *The openness to privatization*

In addition to the various power distributions among local stakeholders, their openness toward a partnership with private actors was also decisive in the decision-making process. Depending on the case, the project of privatization was more or less accepted by local stakeholders.

In Berlin, although the way of privatizing water services differed among local actors, a great number of actors in the senate and the parliament were for privatization. The senator for finance, endorsed by a part of the SPD, supported a concession model, while the senator for economic affairs, endorsed by a part of the CDU and the utility's management strived for a stock market listing of the utility. However, all these actors agreed that a partnership with a private partner through an international call for tender would result in covering Berlin's structural deficit and would improve the utility's performance. Before privatization, both senators argued that a partnership with private operators would ease the expansion of the utility's business at the international level and in competitive businesses. This would in turn generate profits and have positive economic consequences at the local level. This argumentation occurred during debates on water liberalization at the European levels

and reinforced the belief that a public-private partnership was the best solution to prepare for a future deregulation of the water sector. The opposition groups in the Berlin parliament and the trade union supported keeping a public and local monopoly. For them, privatization would result in a water price increase, a neglect of service quality and environmental standards, as well as considerable lay-offs. It would have important negative consequences on the local economy, citizens and employees.

In Frankfurt, stakeholders were not open to a partnership with a private operator based on an international call for tender. A large number of stakeholders agreed that a cooperation with an international private partner would be too hazardous since the strategies and interests of these actors would not be very predictable and might have unexpected consequences on the local services. By contrast, the mayor, endorsed by the utility's managers and a great number of members of the city council, supported a partnership with Thüga. The operator was already active in Frankfurt, had already secured a favorable relationship with local stakeholders and was perceived by a great number of decision-makers as a strategic partner of the municipality. Moreover, Thüga took a clear stance on its cooperation philosophy, which was in line with the expectation of local stakeholders — e.g., keeping a minority shareholding in municipal utilities, not being involved in the local businesses, and leaving the control of the urban services to the municipality. An important point was that a partnership with Thüga would not threaten the cross-subsidies. To a great number of local decision-makers, Thüga would be a good partner for the utility as it sought to develop a business at the regional level and above all to construct a regional strategy in the water sector. However, members of the Green Party argued that a partnership with Thüga would reduce local government control over urban service policy.

Like in Frankfurt, the majority of local actors in Leipzig were against a partnership with a private partner based on an international call for tender. They emphasized the crucial role of the utilities for the municipality and its citizens and the danger of privatizing. First, privatization would only lead to short-term profits and therefore have negative consequences on the long-term development of the utility. Moreover, a part of the profit generated by the utility would be transferred every year to the private partner, which would represent a financial problem for the

municipality in the long term. Second, utilities were perceived as an essential instrument for the municipal economy and privatization would weaken the utility, since it would lead to considerable lay-offs. These actors based their argumentation on the utilities' reputation and their role for the local and regional development through a commitment at the local and regional levels. Finally, like in Frankfurt, the necessity of keeping the cross-subsidies was presented as a crucial argument against privatization. Like in Berlin, the position of the mayor — as well as CDU and FDP members of the city council — was that it was necessary to privatize to cover Leipzig's budget debts and to reinforce the economic potential of the utility through a partnership with an international operator. However, these actors did not agree on the scope of the privatization, that is, on how many utilities and shares would have to be sold to a private partner.

#### *The strategies of local actors*

Finally, local stakeholders also used various strategies in order to establish or hinder a partnership with a private operator. In Berlin, the finance administration initiated the privatization process and took control over the project. It first built a consensus with the senate for economic affairs on the way of privatizing the utility and worked on finding the endorsement of a political majority in the Berlin parliament. For that purpose, they defined the solution of privatization through an international call for tender as the only possible alternative to cope quickly with Berlin's structural budget deficit. It also had to bargain with the trade union and take its demand to maintain the utility public into account in order to obtain its endorsement. In addition to this consensus building, the senate worked on keeping the decision-making process in its hands and excluding as many actors as possible from it. Utility managers and civil associations were thus excluded from the task of defining a solution. The senate for finance also started to establish close relationships with private actors before the beginning of the privatization process. During the negotiation with private actors, the steering committee tried to exclude journalists as well as members of the Berlin parliament from interacting with the competitors. The only actors allowed to communicate with private operators were the members of the steering committee and its consulting group. The challengers of the privatization also attempted to influence the decision-making process. In parliament, the members of



the Linke and Green parties used the law to stop the process. The trade union organized protests with the employees of all utilities. Nevertheless, in contrast to Leipzig, their initiatives were too uncoordinated. Furthermore, these actors suggested several alternatives to the privatization, and did not concentrate on fighting the privatization as they did in Leipzig.

In Frankfurt, like in Berlin, the construction of the problem and the elaboration of solutions remained essentially in the hands of the elected government, although more actors were involved in the decision-making process, such as the utility's management. In this case, the dominant coalition was built through the organization of several meetings between technical and political experts to discuss and define the solution to adopt. Through these meetings, the SPD finally decided to support the merger project of the mayor and not the privatization project of the deputy mayor for finance. In addition to this coalition building, the mayor cultivated close relationships with Thüga and PREAG managers. Together, they framed the merger as the best solution for Frankfurt, since Thüga was already a trusted partner of the municipality. In contrast to these two first cases, Leipzig's mayor did not succeed in building a strong political coalition around its privatization project. For the Linke and Greens, privatization was not a suitable alternative, while the FDP and CDU wanted the mayor to privatize more extensively than he expected to himself in his project. The Green group in the city council also used the law in order to stop the merger and tried to influence the process by attacking the close relationship between the mayor and Thüga. As in Berlin, no strong coalition was built between actors inside and outside the city council in order influence the decision-making process.

In Leipzig, the scope and goals of the privatization were not clear and various competing privatization projects were suggested by members of the administration and the utilities. In contrast to Berlin, the mayor did not succeed in building a strong political coalition around one solution and in bargaining with stakeholders opposed to a privatization. The mayor did not even campaign against the citizens' initiative in order to defend his privatization project. In Leipzig, the dominant coalition of actors was against change. While the privatization plan was approved by the majority of the city council members, the struggle against the reform took place mainly outside the city council, through the APRIL network, together with members of the city council (Green and Linke), the trade unions, and citizens. They started influencing the

debates during the construction of the problem and the definition of solutions. As soon as the privatization project was decided, they reinforced their strategy of making privatization a public issue and worked on involving the local population in the debates. In this case, it can be noticed that no alternative solution to privatization was designed, but all actors concentrated on supporting the public and local utilities and stopping privatization.

### **The emergence of systems effects following the reform**

Depending on the case, various consequences, anticipated or not, emerged following the attempt to change the local organization of water services. First, in each case a modification of the relationship between actors could be observed. Second, these modified relations created increasing contradictions between profit-making objectives and public duty within the utilities. Last, this increasing contradiction has resulted in new debates or conflicts concerning future reforms of local urban services.

#### *The modification of the relationships between actors*

In the three cases, a modification of the relationships between actors was observed. In the case of an integration of urban services, the modified relationships were characterized by a maintenance or a reinforcement of the power distribution among local stakeholders. In the case of a privatization, the modification of the structure of relations among actors seems to have been more significant since a private partner was integrated into the system and the local actors in charge of governing the water services lost power.

Integrating urban services, as occurred in Frankfurt, enabled the municipality to rely on several synergies by reinforcing the interdependence between water, energy, and public transportation. It also enlarged the scope of action of the local government, which could use cross-subsidies and have more leeway on the pricing policy of urban services. The creation of a larger utility, which took the form of a joint-stock company, also gave more financial and economic scope of action to the utility's management. Although the integration of the local urban services in

Frankfurt resulted in a partnership with a private operator, the power distribution between the local actors did not seem to have been deeply affected. Since the operator did not have to rely on a blocking minority within the utility, it had a limited influence on the local public services. Moreover, this partnership has even provided more resources to the mayor and the managers of the utility, since they could reinforce their relationships with Preussenelektra and also benefit from Thüga technical expertise and financial resources in order to manage Frankfurt urban services.

In Leipzig, the creation of LVV was also expected to reinforce the financial power of the local government and its control over the various utilities. With the creation of LVV, local stakeholders expected to create a competitive multi-utility and to generate financial benefits from cross-subsidies. The introduction of a general management for Leipzig municipal utilities was expected to result in a better control of the activity of the various utilities, and to contribute to defining a common strategy for Leipzig's urban services. However, integration resulted in conflicts between managers of the various utilities, who were used to managing their utility independently from a holding. The holding management did not reach the goal of creating a common strategy and enhancing the control over the utilities. It remained essentially a finance holding in charge of cross-subsidies. Hence, the modification of the relationships in Leipzig did not change as much as in Frankfurt despite a similar modification of the structure of relations between actors. Following the privatization attempt however, the structure of relationships between actors changed since the APRIL network became a central actor in the governance of Leipzig urban services.

In contrast to the other cases, Berlin never relied on a *Stadtwerke* structure and cross-subsidies in order to manage its urban services and local decision-makers did not perceive any benefits to implementing such a model. By relying on a partial privatization however, the actors' relationships were deeply modified. Following the bid, the private consortium took over 49.9% of BWB's shares and gained a large influence over Berlin water services, which was enforced in the privatization contract. Managers from the private companies were put in charge of the utility by taking control over the management boards. During the first three years, a Vivendi manager became CEO of BWB's management board and a RWE manager became CEO of BWH's management board. In 2002, when the management boards of both

entities merged, the Vivendi manager remained BWB's CEO while a RWE manager became BWB's CEO. In addition, the private operators had a blocking minority in order to influence the strategic decisions. Even though Berlin was represented in the management board and in the supervisory board, Berlin's local government had to give up a great deal of control over the city's water services since it was not able to decide alone on several issues, such as pricing, investments, strategic development.

*Increasing tensions within the system*

In all three cases, tensions within the system emerged following the modification of the structure relationships among actors. These tensions had different origins and were more or less intense depending on whether the utility was privatized or not.

In the case of Frankfurt, the merger did not produce the expected outcomes, that is, to secure competitive prices in all public services and prepare the utility for the future liberalization of the energy sector more generally. Maintaining competitive prices in the energy sector in addition to cross-subsidizing public transportation did not improve the utility's economic situation and finally resulted in increasing water prices. A tension emerge within the system since Thüga obtain fixed divided from Mainova, as defined in the contracts. Shortly after the integration, the utility managers claimed that maintaining cross-subsidies would hardly be possible in such a situation. The solution applied to eventually cope with the problem did not resolve it. In addition to this problem, Mainova did business outside its local borders through its investment in Hessenwasser and its participation in Thüga's takeover. While these activities enabled the utility to generate profit, they might have been potentially in contradiction with the goal of fulfilling its public mission. However, both businesses have remained in the field of the utility's core competencies and were widely welcomed among Frankfurt's local stakeholders.

In Leipzig, the integration of the utilities into LVV was justified on the basis of the cross-subsidies and the fact that this solution was commonly adopted in Germany and resulted in an economic improvement for local urban services. However, the holding faced a similar situation as in Frankfurt. Balancing the utilities' deficits with the profits of the others was hardly feasible since public transportation and — in the beginning — water services were both in deficit and the

energy utility had to deal with the price pressures from the liberalization as well as with new investments. In the case of Leipzig, the tensions between profit and public mission were striking at the holding level with the creation of a great number of subsidiaries in various sectors outside the domain of public services. This development was strongly criticized by local stakeholders as counter-productive, since it impeded the activity of private enterprises at the local level. While KWL remained a fully local and public utility conforming to the principles driving water services in Saxony, its use of finance derivatives in order to generate profit resulted in a crisis, which has had important political and financial consequences for the utility's management board and the local administration.

In Berlin, during the bargaining with the private operator, the local government obtained several guarantees on prices and employment. Water prices had therefore been frozen for the next four years following privatization and an increase in water prices was already planned for 2003. However, tensions between the public duty of BWB and its profit motive could be noticed. Through an important expansion of the water business at the international level and the development of competitive business in order to generate profit, BWB was criticized by local stakeholders as neglecting its public service mission. While these international developments were restrained under the influence of the private operator following privatization, actors also criticized the high profit generated by BWB, which was shared between the private consortium and Berlin. For several stakeholders, these profits expected by BWB's shareholders were the product of the increasing water prices over the years.

#### *An upsurge of political debates and conflicts*

These tensions within the system resulted in the emergence of new political debates about municipal public services and the necessity to privatize or remunicipalize. Whether water services were maintained in public form or privatized, various stakeholders conducted a critical evaluation of the policy process. In case of privatization, this resulted in strong conflicts between local stakeholders.

In Frankfurt, actors from inside and outside the city council made a critical evaluation of the merger. This situation however did not lead to strong conflicts. Following a water price increase in 2000, the cartel authorities and ministry for environment of Hesse required Mainova to lower its water prices, since it was

profiting from its monopoly situation. In addition to these pressures from the state administration, debates on the validity of the reform took place inside the city council because the utility did not deliver the outcomes that the local government expected. Two main issues were debated: the privatization or remunicipalization of the utility and the maintenance of cross-subsidies. However, neither of these debates represented a real project to put on the political agenda. This critical evaluation of the utility's performances stopped when Frankfurt, together with other municipalities, bought Thüga from E.ON. Frankfurt's local government could consolidate its position inside the utility and extend its influence to other utilities across Germany. Inside the city council, this decision was perceived as a strategic move and described by the left faction as a first important step toward remunicipalization.

In Berlin, the complexity of the model established in order to facilitate a partnership while respecting the demands of the various stakeholders led to strong criticisms and conflicts between the stakeholders, starting from the first price rise in 2003 and continuing from there. The price and profit issues were taken over by different actors and led to important pressures on the partnership. Actors defending the interests of citizens started attacking the privatization arrangement. The fights over the transparency of the privatization contract and against steady increases in water prices were also accompanied by pressures from the cartel authorities to make BWB lower its water prices. Moreover, conflicts between the senate and the private partners escalated inside the utility. These conflicts concerned the water price calculation and the profit generated by the shareholders, as well as the disproportional repartition of the dividends among them. In the case of Berlin, the political debates on water services did not remain a political discussion within the Berlin parliament and among shareholders but became a public issue involving actors outside the local government as well. These actors exerted strong pressure on the local decision-makers in order to make them remunicipalize water services, which eventually happened.

In Leipzig, keeping water services under public management did not result in a strong critical evaluation of the organization of urban services. The privatization failure however has produced further conflicts between proponents and opponents of the privatization outside the utility. On one side, the APRIL network still pursued its monitoring of the municipal utilities and its campaign against privatization. It

claimed several times that it would organize a new citizens' initiative if a new privatization project was approved. This actor represented a real threat for private investors, who were not sure that a partnership with Leipzig would work, even if the municipality approved a new privatization project. On the other side, the state administrative authorities increased its pressures on the city council in order to make it reduce its deficit. It suggested that the municipality sell the LVV subsidiaries that were not part of its core business. The municipality in turn increased its control on LVV and exerted more pressures on it to make it increase its financial contribution to the municipal budget.

To summarize, the interventions of actors for or against a privatization created several anticipated and unanticipated consequences, called system effects. These consequences generally took the form of a modification of the structure of relations between the central stakeholders, of increasing tensions between different goals within the system, and of an upsurge of political debates on privatization or remunicipalization of municipal public services. These effects were more significant in the case of Berlin, where water services were privatized as in the cases of Frankfurt and Leipzig, where local authorities have kept control over the municipal services.

Summary: The comparison of these cases has shed light on three possible evolution paths that may be taken by a municipality and its water utility — that is, keeping the full control over the utility, establishing a cooperation with a private partner while keeping control over the utility, selling shares to a private operator and at least partly losing control over municipal services (Fender and Poupeau, 2007: 376). These developments of local water services were driven by two types of reform. Integrating urban services into the same organization was a reform that enabled local stakeholders to preserve or reinforce two main components of the system — e.g. the cross-subsidies and the municipal control over the urban services — while bringing change in the utility management and structure. In the case of a privatization organized by an international call for tender, this generally resulted in the introduction of a new actor in the local water governance and a loss of municipal control over these very services. The second kind of reforms, the privatization, seems to emerge as a priority of the municipality once the municipal deficit has reached a

certain threshold. The capacity of actors to undertake a reform is also dependent upon their specific involvement in local water services, their openness to an alternative solution for water governance, as well as the strategy they implement. Finally, the intervention of actors in bringing about a change in water services may result in system effects. These consequences are more significant in the case of a privatization than in the cases of integration and may result in new reforms of local water services.



## **Chapter 8: Discussion and conclusion**

In this last chapter, the principal findings of the study are discussed in regard to the research questions developed in the introductory chapter, that is, 1) the variety of local path developments in a field marked by high stability, 2) the role of strategic, distributed, and embedded action in this process, and 3) and the influence of system effects following a deviation from the path. I conclude the discussion by showing how path dependence could benefit from adopting a dialectical perspective on organizations. Following this discussion, I conclude the thesis by emphasizing the contribution of this study, reporting several empirical implications and discussing further developments.

### **Critical Discussion**

By studying organizational path-dependence theory under a strategic analysis perspective, the overall purpose of this thesis was to account for a variety of path development in locally organized systems and to examine the role of strategic collective action in bringing about or struggling against a change in an organizational path. Applying strategic analysis to the study of organizational path-dependence made it possible to shed light on several key issues left open by the path dependence framework: the tensions between stability and change at different levels, the significant role of actors' strategies and conflicts, and the origin and consequences of an organizational path change. In taking stock of all these issues, this study can argue that research on organizational path-dependence would benefit from a dialectic analysis of organizational stability and change.

*A variety of local changes in a field marked by a strong continuity*

This thesis began by exploring the creation of the German water sector. Influenced by the decentralized form of the German federal state, the German water sector has been historically organized in local monopolies. The characteristics of this model are the integration of the water distribution with energy and public transportation business units and the exclusive management of and strong control over the utility by local government. Since the creation of this sector and despite several crises that directly or indirectly affected this sector — i.e. Reunification, liberalization pressures and municipal financial crises — the principal properties of the German water services have remained resilient to change. Despite the existence of a field marked by a high stability, various path developments in local organized systems could be observed. Through a clinical analysis of the three local water policy systems, it was possible to show that the local organizational path could be maintained, inflected, or even broken. Three degrees of path development were thus identified, encompassing various degrees of control kept by the municipality over the local water services.

In addition to the distinction between field level stability and local changes in organized systems, tensions between organizational continuities and discontinuities within organized systems at the local level could be observed depending on the development of the path and the nature of the change process. While continuity elements related to the organization and governance of the German water sector dominated path maintenance and inflection, the path-breaking case was in contrast dominated by elements of discontinuities. Nevertheless, the former systems also integrated elements of discontinuities while the latter system incorporated elements of continuities. In the scenario of path maintenance, while organizational practices changed, the control over the water services and the dominant logic of the system remained stable. In the case of path inflection, organizational practices and the pattern of governance changed but the dominant logic of the system remained stable. Finally, in the case of path breaking, changes were not only observed in organizational practices and governance, but in an erosion of the dominant logic structuring these services as well.

Continuities and discontinuities may therefore coexist within the same system and are not opposed to each other. In fact, they may influence each other in a

dialectical way. On the one hand, organizational discontinuities may be necessary to strategically maintain continuity within the organized system, as was shown in the case of Leipzig and Frankfurt. In such scenarios, changes in the organization may be necessary for securing the long-term stability of the organized system. Moreover, dramatic changes in the environment of the local system — as was noticed in the case of Leipzig — may contribute to reinforcing the local and public character of water services. On the other hand, the continuity in several organizational elements of water services was a prerequisite in bringing about a rupture in the organized system. As it was observed in the case of Berlin, maintaining the legal public form of BWB was an enabling factor of privatization contrary to what might have been expected by several local stakeholders.

*The significant role of strategic embedded agency in explaining the variety of paths*

Within each organized system, the various paths taken, as well as the tensions between organizational continuities and discontinuities, largely depended upon local constellations of actors, whose action is limited by the regulation and the dominant logic of the sector. Therefore, agency was not only distributed and embedded, as has been suggested by Garud and Karnøe (2003) but was also collective and strategic. Stability and change within each local system are less the product of self-reinforcement than the result of collective action, even though mechanisms may have a structuring influence on the context in which actors evolve. Moreover, path-dependent dynamics are not just the product of proponents against opponents, which is a too dualist vision of the process, but rather the ongoing result of complex interactions, cooperation, conflicts and compromises between concrete actors inside and outside the organized system.

Depending on the local context, actors were more or less embedded in a network of rules, resources and interrelationships. This embeddedness in local systems is defined as the effect of concrete mechanisms which evolved over time and varied across local settings. During the phase of path shaping, actors influenced the path by implementing different kinds of mechanisms. Depending on this, they have had various intensities or properties, which in turn left more or less scope of action to actors. This embeddedness both constrained and enabled actors to bring about or struggle against organizational change in each of the local systems studied in this

thesis. Purposive action is affected by its embeddedness in a concrete system of social relations (Granovetter, 1985: 487). Thus, depending on the specific embeddedness in each local system, actors have in fact the possibility of diverging from the established path and relying on exogenous alternatives to structure their systems.

Although the embeddedness of actors in local systems contributed to constraining actors' scope of action in these various settings, this research suggests that organizational continuities and discontinuities within each system are largely dependent upon the specific context in which change takes place, and vary depending on the local constellations of actors, their interdependencies, and strategies. Hence, a clinical analysis of various systems pointed out the importance of actors' strategies and power relationships in bringing about or struggling against change in the organized system. Depending on the cases, local decision-makers relied on various strategies in order to reform the system. This in turn resulted in the reaction of other actors, who struggled against reforming this very system or against the specific way of reforming the system. The findings of this study demonstrate that building a strong political coalition within the local government, framing the debates on privatization, and ensuring a close relationship between external actors and powerful local actors are fundamental in order to bring about a rupture within the system. In contrast to such scenarios, a weak political consensus and a strong diffusion of power across local actors were two factors that contributed to path maintenance. The interdependence between the central actors of the system, namely the local government and the utilities' managers, were found to be highly significant for understanding the change processes within each system. When utilities' managers were not able to fulfill the policy program in terms of water services and thereby threatened the reputation of the local government, fundamental changes within the system were more likely to occur. When power between both actors was more balanced or more in favor of the utilities' managers, reforms were likely to be more incremental or result in more stability within the system. Around this central interdependence, a great number of actors with heterogeneous interests might have been involved in the decision-making process. In the three cases, it was shown that the more the constellation of actors is complex and the more power is distributed among a great number of actors, the more it is difficult to bring about deep changes

in the organization of water services. Thus, the local path development seems to vary depending on the local governance structure. While abrupt changes in the organization of water services seems to be driven by more centralized governance structures, where the decisions remain in the hands of the local government, organizational continuity seems to be influenced by a more participative governance structure, where the decision is influenced by several actors from inside and outside the local government.

*The origins and consequences of stability and change in organized systems*

Research on path breaking change has remained an important blind spot in the literature on organizational path dependence. While a great number of studies have recently pointed out this limit, there is still limited research on this topic. Relying on Strategic Analysis, this study also attempted to harness current research on organizational path dependence to generate a better understanding of the conditions and consequences of a path-breaking change in an organizational context.

In the three cases presented here, evidence showed that change in organizational paths is the co-product of exogenous events — such as the financial, material, regulatory and competitive pressures exerted by Reunification or the regulatory and political pressures exerted by the European policy on public services — and dynamics endogenous to the system, that is, when actors inside the system strategically rely on external events for their own purposes. When external events occur, the cognitive lock-in that influences the actors in the system and that drives the path may become weaker and threaten the stability of the system. This may induce several actors to attempt to deviate from the path by relying on an alternative or exogenous course of action. Although actors were marked by a strong cognitive lock-in, they were not equally influenced by this lock-in. By relying on organizational languages (Thoenig, 2005), it was possible to shed light on the cognitive continuities and discontinuities within each system and observe that these continuities and discontinuities vary across settings. In the case of path maintenance, the system has been dominated by an endogenous language, whereas in the case of path breaking an exogenous language prevailed within the system. Finally, in case of the path inflection, the exogenous actors adopted an endogenous language that was prevailing within the system. In addition to the influence of external events, path

breaking is constructed and enacted by actors inside the system. These actors work toward change by relying on previous organizational structures or strategies (Sorge, 2005b: 116).

This study has demonstrated that it is crucial to take the consequences of a path change into account. It suggests that depending on the nature of change and the way it was brought about, various effects, intended or not, positive or negative, might emerge and further influence path development at the local level. Depending on the local constellation of actors and its embeddedness within the specific system, the reforms may take various forms and consequently lead to different outcomes. In addition, power struggle is a central concept for explaining the deviation from established standards or expectations and the creation of unanticipated outcomes (Vaughan, 1999). Analyzing the reaction of the system following a reform is therefore a crucial aspect to take into account when one aims to analyze the consequences of change. In the case of path maintenance and path inflection, change was based on solutions endogenous to the system and contributed to maintaining the organizational path. No dramatic changes in the relationships between the actors of the system occurred. Such changes might however produce vicious circles, since the organization failed to deal with the situation which was intended to be corrected — that is, coping with utility deficits and municipal financial problems while maintaining low prices. This situation in turn resulted in political debates and a critical evaluation of the policy outcome, although no real conflict arose between the stakeholders involved in the policy. This led eventually to further changes in the organizational practices in order to stabilize the organization. By contrast, in the case of path breaking, important changes in the local constellation of actors and their interrelationships took place through the introduction of powerful external actors within the system. In this case, no vicious circles were observed. However, such a change resulted in strong conflicts among the actors of the system and led to debates concerning new changes within the system. Pressures from inside the system were exerted in order to go back to an organization under the control of municipal actors.

Including mechanisms to a broader understanding of system effects may analytically enrich the analysis of organizational persistency despite pressures to change. The analytical mechanisms used by the literature on path dependence are not the only mechanisms that contribute to impeding changes within the organized

system. Other kinds of mechanisms, such as conflict escalation or increasingly contradictory goals may also have a strong impact on the direction taken by the path. Overall, these systems effects show that an organized system has strong homeostatic properties and often defends itself against attempts to change at different stages of the process. These effects may impede the implementation of a reform, such as in a case of path maintenance, reinforce the system of actors, such as in the case of path inflection, or lead to a strong critical evaluation of change and result in pressures in to embark on a new path change and to return to the previous system, as occurred in the case of path-breaking. Through the analysis of systems effects, the study showed that conducting a reform that would result in a rupture with the path is very challenging.

*Toward a dialectical perspective on path dependence and change*

As a concluding note to this discussion, I argue that the literature on organizational path dependence would most certainly profit from a more formalized dialectic perspective on organization. Such a framework, which was already formalized for analyzing organizations (Benson, 1977), inter-organizational relationships (McGuire, 1988) and institutions (Seo and Creed, 2002), would allow us to integrate the various points discussed below and to bring a better understanding of organizational path dependence as a multilevel process driven contradictions and by conflicts between strategic actors. Indeed, the dialectical analysis relates to several concepts that were taken into account in this study: the system as a social construction, the integration of this system in a social totality, the presence of contradictions and change within the system, the involvement of active agents in the process of reconstructing social relations. While this research did not focus on a formal analysis of path dependence as a dialectical process, such formalization would not only extend the understanding of an organizational path but also pave the way for interesting empirical studies.

This thesis has adopted a social constructivist perspective on path dependence. According to this perspective, the path is the product of the ongoing interactions of actors and not an independent entity influencing these actors. The path is therefore produced, maintained, and changed by actors. The direction of the path is strongly dependent on the interests and power relationships of these very actors. The

dialectical analysis would also enable us to add a multilevel perspective to the analysis of path dependence, since organized systems are both partially autonomous and interlocked into a broader system, defined here as the sector. While the path is maintained and reproduced by the effects of mechanisms that drive actors into a state of partial lock-in, this situation may also result in the emergence of contradictions and changes within the system. Hence, the mechanisms analyzed by path dependence could add to the understanding of how contradictions emerge in a social system (Seo and Creed, 2002: 228). Contradictions may emerge from the tensions between the organized system and the sector in which it is embedded (Benson, 1977: 14). As this thesis has shown, a major contradiction can be found between the goal securing a good and cheap service for the local population and the aim to generate profit in order to cope with the financial deficit of the municipality. Depending on the context, such a contradiction may be more or less strong and therefore contribute to the transformation of the system. A dialectical perspective on path dependence may therefore be an interesting framework for understanding how a path-breaking change may occur as the product of increasing contradictions resulting from the lock-in situation, and for explaining how actors can escape a path in which they are trapped. Contradictions may in turn exacerbate conflicts between actors who become active agents and attempt to influence the reconstruction of the path. In that case, actors may mobilize other actors in order to construct alternative social arrangements more in line with their own interests and therefore to transform the path.

Finally, a dialectical perspective shows that organizational solutions adopted inside an organized system are almost continuously threatened by forces that attempt to transform the established arrangement. The organization is therefore perceived as an ongoing process driven by conflicts between various actors peopling the system which results in the adoption of a specific alternative. This alternative may represent a synthesis, or a compromise, of various propositions supported by different actors. In turn, this alternative may be undermined by other actors aiming to redirect the path in a direction that would be more in keeping with their own interests. From a dialectical perspective, the path could thus be conceived of as a process driven by cyclical and recurrent dynamics, where the new arrangement becomes the thesis, which would subsequently be attacked by actors supporting the antithesis. This would produce a synthesis, which would become another thesis (Hargrave and Van



de Ven, 2006: 865). This ongoing reconstruction of the path within a broader system would support the definition of a lock-in as a “provisional stabilizations within a broader structural process” (Garud et al. 2010: 769).

## **Conclusion**

### *Further developments*

This thesis has opened several pathways for future research both in the fields of path dependence and of water policy. First, the study focused on three mechanisms — coordination, complementarity, and sunk costs — but it seems that further mechanisms could have been analyzed in this study. The learning effect as link between the sector level and the municipalities may have played a significant role in the diffusion of a specific model of water government and may have contributed to stabilizing it over time. However, the study of additional explanatory mechanisms is an endless quest, which has to be stopped at a certain point (Anderson et al., 2006: 107).

Second, the research focus was on the micro-dynamics of stability and change despite a striking continuity at the sector level. However, local dynamics may also have an impact on the macro path and further detailed studies can be conducted concerning the effect of micro-dynamics on the path-dependent process at the sector level. Evidence of such dynamics could have been found in the case of the remunicipalization of the Potsdam water utility. A couple of years after the partial privatization of the utility, the partnership between the Potsdam municipality and Eurawasser was stopped. This rupture of contract had important consequences on the diffusion of public-private partnerships in the German water sector. More precisely, it contributed to reinforcing the stability at the sector level by reinforcing the belief of local decision-makers that keeping control over the local water management was the best solution. While several consequences might be easily revealed, the origin and the causal effects of such micro-dynamics on the macro level are still unexplored and could represent a further interesting contribution to path-dependence analysis.

Second, this study serves as an invitation for other researchers to expand the analysis to further countries and to compare path-dependent processes at the sector and local levels in greater detail. Further comparison with other local cases in other

national settings would enable researchers to expand the analysis of path-dependence and rupture at different levels. Comparative frameworks are strong instruments for analyzing path-dependent processes. A comparison with other national water sectors would enlighten researchers not only on differentiated path development at the sector level but would also result in the study of local dynamics of change within specific national settings. Briefly outlined in Chapter 4, the French model of water management was for instance dominated by national and private companies since the end of the 19<sup>th</sup> century, and represents a contrasting model to the German water sector despite several similarities in their management. At first glance, a national comparison would bring insight into the constitution over time of two contrasting paths at the field level. In analyzing cases where a remunicipalization took place — as in Grenoble or Paris — would also allow researchers to expand the analysis of path change and rupture at the local level and compare the local dynamics of stability and change in two countries where the patterns of organizational change considerably diverge. In Great Britain, where privatization waves affected public services — including water services — during the 1990s, clear evidence of path-breaking changes could most likely be identified. At first glance, a comparison with the English model of water services would bring interesting insights into the path-dependence model studied here. First, the comparison at the sector level would reinforce the stability assertion of the German water sector. In comparison to Germany, the water sector in England was subjected to dramatic changes in its organization and mode of governance through a process of centralization and privatization during the 1990s. Second, it would put the notion of rupture that was used at the local level in the case of Berlin into perspective. During the 1990s, English municipalities had to give up their control over water management, which was then transferred into the hands of regional authorities and eventually privatized. Compared to partial privatization in Germany, where municipalities still have an important role to play in the water management, English privatization of water services therefore represent a clear case of path-breaking change. In addition the analysis was limited to the impact of private operators on a setting that would be characterized as having a high institutional density, e.g., where formal institutions and public policy are deeply entrenched and represent an important constraint (Pierson, 2000: 259). Further research could focus on the impact of private operators

on countries with a lower institutional density, such as developing countries, for instance, or countries in regime transition. In general, extending the comparison to other institutional settings at the national and local level would enable researchers to enlarge the typology of stability and change in organizational paths.

In direct link to the last point, this thesis could also be extended to analyzing precisely the international path of water utilities under an international management perspective. Relying on an institutional perspective, scholars have already demonstrated the need for international business studies to take the interaction between MNCs' strategies and particular institutional settings into account (Sorge, 2005a; Jackson and Deeg, 2008). Recent studies on MNCs have even developed a model that differentiates agents (economic actors within the MNC with a logic oriented toward economic performance) and actors (local actors with their own logic) in order to better study the interaction between both (Molz et al., 2010). In accordance with these recent studies, a continuation of this thesis may contribute to further discussions of interaction models between MNCs and local actors in the water sector, which represents a highly embedded field. As noted in this thesis, the country of origin of the private partner and the host country represent crucial factors in the analysis of public-private partnerships in the water sector.

Finally, as this study came to a close, a remunicipalization of the Berlin water utility started. This process of remunicipalization would have needed a more detailed analysis and to be integrated into a broader discussion on path dependence. Does this remunicipalization contradict the thesis on path dependence or does it confirm the view of an organizational path as a dialectic process?

### *Theoretical contributions*

The main theoretical purpose of this study was to understand the role of strategic collective agency in bringing about or struggling against changes in path-dependent organized systems. In the light of this, the thesis made two major contributions to the theory of path dependence. First, it showed how and why path change may occur differently across various setting. Second, it helps understand the specific role of strategic actors in these change processes and the consequences of these changes.

This study first contributes to the literature on path dependence by expanding the understanding of organizational change in path-dependent processes. While the classical perspective on path dependence usually overemphasizes the influence of external shocks on change, the social constructivist perspective on path dependence mainly focuses on the process of path creation. Building on this blind spot, this study expanded the analysis of path change in three ways. First, it contributed to unraveling the tensions between stability and change within each organized system. These tensions have so far been neglected by the path-dependent literature, which considered organizational stability and change as two opposed stages of a process. It also demonstrated that continuity and change are not opposed to each other. In adding Strategic Analysis to the study of path dependence, it was possible to show that changes in organized systems were possible despite the high continuity of the field. Second, relying on a clinical analysis of three cases, this study gave a more realistic picture of this process and provided a much more complete and integrated framework for analyzing path continuity and path change in organized systems. The variety of change scenarios examined in this study contributed to putting the overly deterministic view of the lock-in into perspective. Last, the study expanded previous research on path-dependence analysis of change by shedding light on the complexity of such a change process. Through a clinical analysis, it was possible to show that change in organized systems may not merely occur at different intensities across settings, but also unfolds in different ways and at different paces across these settings. In doing so, the following study intended to move away from an overly linear view of organizational stability and change.

The second contribution of this thesis was to unravel the crucial role of strategic collective action in driving the path-dependent processes in organized systems. Without analyzing actors' constellations over time, studying the direction taken by a path-development process as well as the nature of changes remains challenging. Building on recent studies on actor-centered path dependence (Botzem, 2010, Sydow et al., 2010, Sydow et al., 2012), this thesis intended to expand this perspective in three ways. First, it aimed to go beyond the analysis of agency in creating and maintaining the path by showing that actors also matter in changing it. Although the importance of actors has been highlighted in the process of path shaping, this study underscored their importance in carrying out a change during a

stage of lock-in as well. Second, it strived to complete this framework by emphasizing the role of actors' interdependencies. While previous works have generally focused on the influence of powerful actors in shaping path-dependent processes, I contended instead that the analysis of the interrelationships between central actors and more peripheral actors is essential to fully understand the influence of agency on path-dependent processes. The study thus showed that breaking or maintaining a path is not the product of efforts by a powerful entrepreneur but the result of a collective game. Finally, by focusing on concrete actors' interests and strategies for carrying out or struggling against change in organizational paths, this study contributes to a better understanding of strategic collective action in path-dependent processes. Studying the concrete interests and strategies of actors involved in the system as well as the way they implement their strategies is a prerequisite for understanding the complex process of path dependence and change. This aspect advances our understanding of a path as the product of political conflicts and demonstrates that an understanding of distributed agency based on conflicts between actors is necessary in order to analyze path change in organizations.

#### *Practical implications*

Through the comparison of various local scenarios of change in the water sector, this study may have various practical implications and provide interesting pieces of information to stakeholders involved in water policy in Germany. The German water sector is highly fragmented and local decision-makers are not always aware of what has taken place in other municipalities. In illustrating three scenarios of water policy processes, this project can therefore enable water experts to learn more about the diversity of the German cases and the kind of arguments that were made for or against privatization.

First, the study may give local decision-makers insights into the variety of strategies used by private operators to participate in partnerships as well as the rationale behind them. Indeed, the interests and strategies of private companies largely vary depending on the nature of the private partner as well as the context and can hardly be reduced to a private/public opposition. Through the analysis of various scenarios, local decision-makers can become aware of the different reform possibilities open to them as well as the potential consequences that these reforms

may have at the operating and policy level. Analyzing policy processes in various localities shows the importance for reformers to design a clear project and build a strong coalition around it. Reformers must be capable of compromising with other stakeholders in order to enhance their chance of implementing their solution. Opponents of the reform must also be able to create a strong coalition inside and outside the government and work on a public diffusion of the issue. The cases also show that struggling against the reform seems to be a better strategy than suggesting alternatives to privatization.

For private partners, the study may be useful for several reasons. First, it sheds light on the contrasting strategies adopted by private operators and may enable one to better understand why some operators have more success in establishing cooperation with local authorities than others. For instance, German energy operators such as Thüga leave a certain leeway to local decision-makers, whereas French private operators aim to control local water management. This variation of behavior toward local governments is important since the control over the local water management is a crucial issue for German local decision-makers. Second, the study can show CEOs that establishing strong connections with the local decision makers at the local level and gaining their trust is necessary to enhance their chance of being included in the decision-making process. More generally, the crucial work of reputation building (such as making commitments at the local level as well as cooperating with local government in other businesses) has to be undertaken by operators in order to be accepted by local stakeholders. Last, the study shows that private operators have to be able to adapt their structure and behavior to the integrated structure of German municipal utilities and its underlying cross-subsidies.

Finally, this study sheds light on the action of citizens' initiatives in various local contexts. A comparison of these initiatives reveals several interesting points. The impact of such initiatives largely depends on the timing of their emergence as well as on the stage of the policy reform. A citizens' initiative may thus have more impact when it is launched midway through the privatization process and more precisely during the stage of problem definition or solution formulation. In addition, its role in monitoring local government actions as well as involving the public in its action on an ongoing basis is decisive to maintain the established arrangement and avoid a privatization. Finally, its capacity to create and maintain strong relationships

with actors inside the local government, with the trade unions and with their employees were critical factors in the success of such an initiative.

On the whole this study sheds light on the way public-private partnerships are constructed and on the underlying logic of the protagonists involved in cooperation-building of this nature. In contrast to the literature emphasising the various modalities of contracting a public-private partnership, the thesis sought to point out the variety of actors involved in the policy process and how they contribute to constructing these partnerships.

# Appendix

## Appendix 1:

City (Inhabitants <sup>329</sup> )	Utility (Legal Form)	Business Units	Shareholders
Berlin (3,431,675 )	<a href="#">Berliner Wasserbetriebe</a> (AöR)	Water distribution	Land Berlin (50.1%) RWE (24.75%)
		Wastewater treatment	Veolia Wasser (24.75%)
Hamburg (1,772,100)	<a href="#">Hamburger Wasserwerke</a> (GmbH)	Water distribution	Hamburg Wasser (100%)
Munich (1,326,807 )	<a href="#">Stadtwerke München</a> (GmbH)	Energy <sup>330</sup>	City of Munich (100%)
		Water distribution	
		Public Transportation	
Cologne (995,420 )	<a href="#">RheinEnergie</a> (AG)	Energy	GEW Köln AG (80%)
		Water distribution	RWE (20%)
Frankfurt (664,838 )	<a href="#">Mainova</a> (AG)	Energy	Stadtwerke Frankfurt / Main Holding (75.2%) Thüga (24.49%)
		Water distribution	Others (0.4%)
Stuttgart (600,068)	<a href="#">Zweckverband Bodensee Wasserversorgung</a>	Water distribution	Bodensee Wasserversorgung Landeswasserversorgung EnBW regional AG
Dortmund (584,412 )	<a href="#">Dortmund Energy und Wasserversorgung</a> (GmbH)	Energy	Dortmunder Stadtwerke AG (53%)
		Water distribution	RWE AG (47%)
Düsseldorf (584,217 )	<a href="#">Stadtwerke Düsseldorf</a> (AG)	Energy	Düsseldorf City (25.05%)
		Water supply	EnBW (54.95%)
		Waste Incineration	RheinEnergie (20%)
Essen (579,759 )	<a href="#">Stadtwerke Essen</a> (AG)	Gas	Thüga (20%)
		Water supply	RWE (29%)

<sup>329</sup> [http://www.staedtetag.de/10/staedte/nach\\_einwohner/index.html](http://www.staedtetag.de/10/staedte/nach_einwohner/index.html) (accessed 30.04.2010)

<sup>330</sup> Energy = gas - electricity - district heating



		Wastewater Harbor	Essener Versorgung Verkehrsgesellschaft mbH (51%)
Bremen (547,360 )	<a href="#">Stadtwerke Bremen</a> (AG)	Energy Water distribution Wastewater	Bremer Verkehrsgesellschaft mbH (1 Share) EWE AG (100%)
Hannover (519,619 )	<a href="#">Stadtwerke Hannover - Enercity</a> (AG)	Energy watersupply	Versorgung und Verkehr Gesellschaft Hannover mbH (75.09%) Thüga (24%) Hannover Area (0.91%)
Leipzig (515,469 )	<a href="#">Kommunale Wasserwerke Leipzig</a> (GmbH)	Water supply Wastewater treatment	Leipziger Versorgung Verkehr Gesellschaft mbH (74.65%) Zweckverband für Wasser Abwasser Leipzig Land (25.35%)
Dresden (512,234 )	<a href="#">Drewag Dresden</a> (GmbH)	Energy Watersupply	Technische Werke Dresden GmbH (55%) EnbW (35%) Thüga (10%)
Nuremberg (503,638 )	<a href="#">N-Ergie</a> (AG)	Energy Watersupply	Städtische Werke Nürnberg GmbH (60.2%) Thüga (39.8%)

## Appendix 2:

	Frankfurt	Berlin	Leipzig
Defining problem	- utility policy - large consensus on problem - problem identified with concrete facts and values	- water policy - weak consensus on problem - problem identified with concrete facts and values	- utility policy - weak consensus on problem - problem not identified with concrete facts and values
Formulating solutions	- Two competing solutions inside the local government - Stakes: financial deficit, utility performance, cross-subsidies - Strong influence of Thüga during the formulation of solutions - pressures from the Greens inside the government	- Competing solution inside (for privatization) and outside (against privatization) the local government - Stakes: financial deficit, utility performance, maintaining public form - Informal influence of private actors, especially LdE, in the formulation of solutions	- Two competing solutions inside the government - Opposition to reform outside and inside the government - Stakes: financial deficit, utility performance, cross-subsidies

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Taking Decision	<ul style="list-style-type: none"> <li>- Strong political consensus on integration's solution</li> <li>- Key role of SPD in the bargaining</li> <li>- decision based on good relationships with Thüga, maintain of cross-subsidies and control over utility (no blocking minority)</li> <li>- Failed motion from the Greens</li> </ul>	<ul style="list-style-type: none"> <li>- Coalition building on holding model, while maintaining public form</li> <li>- Legitimacy based on balancing public and private interests, business development, and financial profit</li> <li>- Failed motion from the opposition</li> </ul>	<ul style="list-style-type: none"> <li>- Weak consensus on partial privatization of SWL followed by a partial privatization of the Holding.</li> <li>- legitimacy based on coping with deficit and getting back municipal financial autonomy</li> </ul>
Implementing program	<ul style="list-style-type: none"> <li>- bargaining with Thüga on shares' reduction</li> <li>- Merger of both utilities: Maingas created new shares and sold them to SWF.</li> <li>- cost reduction through: employees reduction and synergies</li> <li>- public transportation cross-subsidizing reinforced with gas</li> </ul>	<ul style="list-style-type: none"> <li>- organization of a bid and partner selection</li> <li>- bargaining with Trade Union</li> <li>- Legal control by Berlin constitutional court and European Commission</li> <li>- creation of BWH, whose 49% shares were sold to private</li> <li>- cost-reduction and reorganization of BWB and its competitive business</li> <li>- creation of KWB</li> </ul>	<ul style="list-style-type: none"> <li>- organization of a bid and bargaining with private operators</li> <li>- preparation of a LVV privatization project by mayor</li> <li>- implementation impeded by the organization of a citizens' initiative, who mobilized the public opinion</li> </ul>
Evaluating policy	<ul style="list-style-type: none"> <li>- short term critical intra-governmental evaluation: cross-subsidies put into perspective</li> <li>- criticisms toward the price policy and organizational development</li> <li>- debates on privatization and further business developments</li> <li>- discrepancy between expectations and concrete short-term effects</li> <li>- increasing pressures from cartel authority from Hesse</li> </ul>	<ul style="list-style-type: none"> <li>- critical extra-governmental evaluation following repetitive price increase</li> <li>- privatization increasingly put into perspective</li> <li>- strong reaction of the local population, organization of a citizens' initiative for more transparency and water price cut</li> <li>- increasing conflict between private and local government concerning the profit's rate</li> <li>- increasing pressures from the cartel authorities</li> </ul>	<ul style="list-style-type: none"> <li>- privatization blocked for 4 years following citizens' initiative</li> <li>- political pressure from the ministry of interior in order to cope with financial problem</li> <li>- Pressure on the municipal utility to improve its benefit</li> <li>- preparation of the mayor for new privatization projects</li> </ul>

## **Zusammenfassung**

Das Ziel dieser Dissertation ist, den Einfluss strategischer kollektiver Aktion auf organisationale Stabilität und Veränderungen in pfadabhängigen Prozessen zu untersuchen. Bisher sind Erklärungen zu Ursprüngen und Folgen von Pfadveränderungen in Organisationen während Lock-in Situationen eher unbefriedigend geblieben. Die klassische Pfadabhängigkeitstheorie erklärt Pfadbrüche ausschließlich durch externe Schocks und die konstruktivistische Perspektive zur Pfadabhängigkeit konzentrierte sich eher auf die Kreation technologischer und institutioneller Pfade statt auf Organisationen. In dieser Studie wird die strategische Analyse nach Crozier und Friedberg verwendet, um folgenden Fragen nachzugehen: Wie entwickeln sich organisationale Pfade innerhalb eines Felds, das von einer Stabilität geprägt ist und dennoch Veränderungsdruck unterliegt? Welche unterschiedlichen Entwicklungen gibt es in verschiedenen lokalen Kontexten? Welche Rolle spielen die Interdependenz zwischen und die Strategien von Akteuren in der Entwicklung von Pfaden?

Diese Fragen werden anhand einer qualitativ vergleichenden Analyse von drei deutschen Wasserwerken und deren Entwicklung seit 1990 untersucht. Privatisierungswellen und Liberalisierungstendenzen öffentlicher Dienstleistungen nach der Wiedervereinigung Deutschlands führten zu einem hohen Veränderungsdruck. Trotzdem scheint die Organisation der Wasserdienstleistungen in Deutschland, traditionell in öffentlicher Hand, insgesamt durch besondere Stabilität und homöostatische Eigenschaften gekennzeichnet. In diesem Feld organisationaler Stabilität werden hier drei Fälle lokaler Wasserwerke mit unterschiedlichen organisationalen Entwicklungen untersucht und verglichen. Neben dem Einfluss von Pfadabhängigkeitsmechanismen auf die unterschiedliche Pfadentwicklung untersucht diese Studie insbesondere die Rolle strategischer Akteure in der Implementierung von organisationalen Pfadveränderungen. Die

Studie erforscht auch die Entstehung von potentiellen Systemeffekten und deren Einfluss auf die lokale Pfadentwicklung.

Insgesamt zeigt diese Studie, dass eine dialektische Perspektive notwendig ist, um die Dynamik organisationaler Entwicklungen in pfadabhängigen Prozessen zu erklären. Stabilität und Veränderungen in organisierten Systemen sind nicht gegensätzliche Phänomene, sondern ergänzen sich. Sie beweist auch, dass Pfadveränderungen nicht allein das Produkt externer Kräfte sind, sondern aus einem komplexen Prozess mit vielfachen Schritten resultieren, der eine große Anzahl an Akteuren mit unterschiedlichen konkreten Interessen und Strategien einbindet. Indem die Rolle von Akteursstrategien und Machtverhältnissen in der Definition und Implementierung einer Reform betont wird, zeigt die Dissertation letztlich, dass die Untersuchung von Interdependenzen zwischen den verschiedenen Akteuren innerhalb eines Systems zu einer Bereicherung der Analyse organisationaler Pfadveränderungen beiträgt.

## **Summary**

The purpose of this thesis is to examine the role of strategic collective action in bringing about or impeding changes in organizational path-dependent processes. Thus far, explanations for the origin and consequences of change in organizations experiencing a lock-in situation have remained limited. The existing body of literature essentially provides explanations of path breaking based on external shocks or concentrates on the creation of technological and institutional paths. Applying the strategic analysis framework developed by Crozier and Friedberg, I addressed the following questions: How does organizational path change unfold differently in various local settings belonging to a field marked by strong stability and at the same time subject to pressure for change? What role do actor's interdependence and strategies play in bringing about or challenging change in path-dependent processes?

This study is based on a qualitative comparative analysis of three German water utilities and their development since the 1990s. Despite recent pressures to change caused by Reunification and dynamics of liberalization and privatization, the organization of water services in Germany, traditionally in public hands, has been marked by a certain continuity and homeostatic properties. In a field where organizational stability prevails, I focus on three cases of local water utilities with contrasting organizational developments. The influence of path-dependent mechanisms on these contrasting organizational developments as well as the role played by strategic actors in bringing about or impeding organizational change are examined. Eventually, various systems effects, expected and unexpected, following the implementation of a reform are observed.

Overall, this research points out that a dialectic perspective is useful in order to explain the dynamics of organizational change in path-dependent processes. Stability and change in organizational paths are not an opposed phenomenon, but do complement each other. Moreover, the study provides empirical evidence for the origin and implications of a path change in organizations. It demonstrates that path

change is not the sole product of external forces but rather needs to be conceived of as a complex multiple step process that involves a great number of heterogeneous actors with diverging interests. By emphasizing the role of actors' strategies and power relationships in defining and implementing a reform, the thesis also reveals the central role of actors' interdependencies in bringing about or impeding organizational change.

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