

Chapter 2

Model for Water Governance: Variables and Performance

2.1 Introduction

In Italy, after two decades of reforms in local public services, the process and its related political, cultural and economic debate is still ongoing apparently without a specific strategic aim. It looks like in fact it has a not linear route whose direction changes on contingencies demand, contrasting with the relevance that local public utilities firms assumed over the last years in our economy and with the influence they have on quality life of population.

At the same time, we assist at an almost exclusively ideological and “mass-media” debate that passing only through legal paths it lacks of focusing on managerial and economic problems, though these are concrete and still unsolved.

Among these, in example, there is the scarce attention to financial and economic performances or to economic equilibrium, against an intense concern to selection procedures (public competitive bidding, in house, etc.) or to the ownership (public, private or mixed) of the providers.

If, in fact, a first guideline of this process seemed to suggest, almost clearly, the market direction, nowadays, with the present serious financial and economic crisis, all around the world there are many cases that show a return to the State. Many of these found their reason in the poor or negative performances related to privatization and in low levels of market competition.

Among the public services, that present many differences—both at geographical level (north and south of Italy) and sector-based level (telecommunication, energy and gas on one side and water, waste and transports on the other side)—the management of water governance seems to suffer of many limitations and problems.

The water sector in Italy, in fact, considering the obvious public attention that this vital resource attracts and the recent norm aimed at accelerating its privatization (DL 135/09), is involved in a negative process that, from one hand, has to conciliate economic and social interests and, on the other hand, it is characterized by scarce investments, obsolete infrastructures and the lowest rate of Europe. This jeopardizes the economy of local governments and their mission, that is the public interests and values protection.

Starting from these considerations, we used a mixed methodological approach, deductive-inductive—typical of business management disciplines—to analyze the variables that can characterize and influence the “privatization” and contracting process in the water sector, trying to understand their relation with the performances of the private providers and the local government contractor.

About this, Italian and international literature, with the support of transaction cost economy and *Public Choice Theory*, since long time have evidenced the limitations of *New Public Management*, too much focused on an acritical introduction of private instruments and logics in the public sector.

The water management, more than other services, fits better a relational based theoretical framework, that takes into consideration apart from the traditional “efficiency” and “cost effectiveness” variables, also equity, democratic participation and value interest as *Public Interest Theory* or *New Public Service* do.

After the analysis of previous literature considerations, we analyze, through the *case study* methodology, the different experiences operating in the international scenario (France, Spain, Germany) operating a performances comparison, in order to verify existence of best practices and their adaptability to our model well described.

2.2 The Literature Debate on Privatization

The privatization of public services in the last decades turned into one of the main arguments of *public management* studies spreading among public administration as an instrument for reducing the costs of goods and services traditionally produced by local governments (Barlow and Röber 1996; Savas 2000; Ferris and Graddy 1991). At the same time the debate can not be considered successfully complete, and the term is still not intended at the same manner (Mele 2003).

Although sometimes privatization produces an efficiency increase, it is necessary to consider that *outsourcing* not always generates an increase of important managerial and social effectiveness. The frequent lack of cost reduction, the scarce quality of services provided, monitoring difficulties and the scarce attention to social accountability in fact determined the failure of several privatization initiatives.

In short, literature reveals the existence of conflicting results on the efficiency and effectiveness of contracting out processes in public companies (Boyne 1998b).

Proponents argue that outsourcing is a way to reduce the cost of services through the higher levels of efficiency related to competition and the economies of scale (Osborne and Gaebler 1992; Savas 1987). Critics sustain instead that outsourcing tends to sacrifice public interest and values (Boyne 1998a; Lavery 1999, Kakabadse and Kakabadse 2001).

The issue has been addressed over time from multiple perspectives, such as public choice theory, New Public Management (NPM), transaction costs, the New Public Service and so on; any of these highlights different aspects and limits of a phenomenon that still today drew the attention of mass media.

If on one hand, in fact, the public choice theory sustain that market is a better mechanism for services delivery because of the efficiency generated by competition, on the other hand, transaction theory proponents warn the public managers into contracting out services without a previous accurate analysis and evaluation of costs associated with outsourcing processes.

The NPM scholars argue that contracting out the public services to private firms can reduce public sector costs and improve public performance through incentives and penalties mechanisms to increase the quality of public services thanks to the higher level of expertise of private sector (Dunleavy and Hood 1994; Hood 1991; Kettl 1993, Osborne and Gaebler 1992; Savas 1987). On the contrary, Denhardt and Denhardt (2003) conduce a critical analysis of NPM constructs and define a long list of values and variables omitted from the famous paradigm and included in their New Public Service theory.

Regarding economic efficiency, in detail, the proponents are sure that whatever the government does, the individual may do better. According to this perspective, economic efficiency can be achieved through free markets and individualism (*laissez-faire*) considered as the best solution for public services delivery.

But, higher levels of economic efficiency result, according to some scholars, from the lower labour costs associated with the private sector than the public sector, whose employees are over-paid and gain higher benefits. The private sector also has the flexibility to hire and fire workers.

As for the quality of public services, privatization proponents believe that since the private operators may not see their contracts renewal they are encouraged to provide services with high standards efficiently. This is not true for public monopolies. In a competitive market, if a services provider does not satisfy consumers they may turn to other operators.

Proponents of privatization argue that a moderate and selective use of privatization mechanisms can help the government to be more efficient, passing its function from direct producer of public services to regulator of a network of contracts (Osborne 1993, p. 107). If the quality of service can be easily measured and evaluated, privatization might be appropriate, but when the quality measurement is based on subjective criteria, the cost savings are difficult to quantify and the government should be more cautious in privatizing.

Skeptics, meanwhile, find that when you evaluate the effectiveness of a privatization process, economic efficiency should be considered along with other “public values” (Donahue 1989, p. 1).

Privatization opponents believes that workers wage, safety and benefits reductions should be included in privatization costs assessment. These “benefits reductions” appear to damage more women and minorities that have been employed in public sector. So even if privatization can reduce the direct costs related to services, indirect costs are often greater than possible savings (Storrs and Villarreal 2001).

Privatizing a public service implies also a public competitive bidding, a selection procedure, the negotiation of contracts and monitoring of performances,

which involve high costs. These costs are often not included in the make or buy analyses, or at least are underestimated.

Regarding social equity, private companies did not provide services in low populated or low income areas, because it is not profitable. This means that privatization sometimes can entail the exclusion of some citizens from “public services” or the elimination of some services if these cannot be conveniently provided.

Studies conducted over the past decade (Ballard and Warner 2000; Ballard et al. 2003; Hefetz and Warner 2004) show how some of the hypotheses underlying privatization processes brought to its failure, forcing local authorities to “contract back in” the services that have been previously contracted out.

Ballard and Warner (2000, p. 1) argues that contracting out is easier than improving internal management in order to increase internal productivity and to reduce costs. Furthermore, some authors retain that contracting out a public services requires a great attention in order to preserve public interest.

An excessive use of contracting out tool to provide public services may figure out a condition that literature defined with the term of “hollow state”; in this case the role of the State is reduced to an “empty” structure, where all government functions have been outsourced in practice, and the only function that remains is the management of a multitude of contracts, with the risk of losing the control (Hodge 2000, p. 241).

In the extreme, the government may become a simple extension of the private sector, with all possible negative implications on public interest. This means also that government may lose its know-how and core competences, becoming nothing more a controller and regulator of contracts, and eventually unable to play also these role effectively.

In summary, although the literature is full of contributions of privatization sustainers, the empirical studies show contrasting results in terms of cost savings and/or service quality improving. Instead of the traditional dichotomy pros and cons, we focused our attention on the different steps that characterize the privatization process and on the identification of governance variables and external conditions that may ensure better performances.

The study conducted brought us to distinguish three main steps within privatization process:

- “make or buy” analysis;
- the vendors and providers selection process;
- monitoring of contracts and measuring of performances.

Regarding water service, as well as other public utilities (like waste collection, local transports), Italian local authorities are “heartly encouraged” by legislator to contract out this service to external providers, in order to theoretically reduce costs and increase the quality of that service. This induce, as often happens, to underestimate some typical costs of this step.

The decision to privatize usually involves a trade-off between the costs and advantages related to the two alternatives, but this analysis almost always does not

include the transaction costs related to the “buy” alternative, that according some studies these can rise until to amount at a quarter of the total cost of contracting out.

Since cost reduction is considered by many authors as the main reason why governments should contract out public services delivery to private sector, these mistakes or difficulties involved the failure of many privatization processes in USA (Hefetz and Warner 2004) and in some European Countries (UK, France, Holland, etc.)

Some studies on transaction costs argue that the decision to contract out should be influenced by: the nature of the service, the market structure, the public management experience in this process and trust relationship with the external provider (Brown and Potoski 2003, 2005).

In addition to efficiency reasons, however, the local authority should also take into account ethics and equity value (Stein 1990). After the government decided to contract out the service, public management have to select the provider.

Regarding the procedure of selection, in Italy the alternatives are two:

- the public competitive bidding with a “double object”, the service and the private provider, whose presence in public sector is encouraged by legislator (he recently issue a new law (L. 135/09) that define some deadline by which the local government have reduce their participation in water sector management and increase the private participation;
- the in-house alternatives that allows to firms avoid the public competitive bidding procedure for the selection, but it should be considered as a rare exception to which recur.

The lack of competition in the water sector, however, requires special attention to the selection process in order to avoid a private monopoly (Donahue 1989; Kettl 1993).

The lack of competition among providers exposes the government to fraud, abuse and poor performance, because bodies do not have sufficient monitoring tools to monitor compliance with contractual terms. The contracting out of a public service, either through public competitive bidding or in-house procedure requires the definition of a contract that include defines the roles and obligations of the two subjects involved.

The contract is one of the main tool through which Local Government play its role of regulator of public services outsources. The successive monitoring of its clauses observation is essential for privatization initiative success (Kettl 1993, Praeger 1994).

“Well monitored vendors are more likely to perform according to contract specifications, thereby improving returns from contracting. Whereas legal, institutional, and service-market constraints can increase transaction costs” (Brown and Potoski 2004).

Previous studies show that governments monitor services more when they contract out, but to be effective the control tools have to be contractually defined (Swindell and Kelly 2000). Poor detailed contracts in fact is one of the main causes of failure (Domberger 1998).

The typically tools for monitoring performance base on cost and service quality, and in general, on contractual terms verification. To define performance indicators that measure qualitative aspects of a service is difficult (Brown and Potoski 2005, p. 343).

2.3 A Managerial Focus

A change of perspective, from the several attempts to measure and evaluate privatization results to a critical observation of its dynamics, may emphasize the role of research and its methodological approaches, that differ from the simple ideological debate on public vs private dichotomy.

Both norms and some theoretical and empirical researches that focused on the nature of provider ownership (public or private) or selection procedure (competitive bidding vs. in-house) in fact showed disappointing results if compared to expectations, so it could become useful to focus on other variable that can effectively influence positively the performance of water services companies.

The past reforms that involved Italian public sector were aimed at increase the autonomy and cost effectiveness of firms, but they lack into define the way:

- autonomy was not associated with a clear responsibility, bringing to myopia, sub-optimization, corporatism and deregulation;
- a misconception of sociality precluded the costs effectiveness aim, by excluding the price lever;
- the absence of effective models of planning and control nor adequate support tools.

In Italy the “coercive approach” to privatization, focused almost exclusively on the theoretical debate public vs private and sector procedure competitive bidding vs in-house, did not helped public sector to achieve economic equilibrium condition.

Other obstacles have been the lack of a cultural change in human resources working in a labour intensive industry such as water sector and Italian familiar capitalism, unable to be competitive in highly concentrated industries like utilities (Pozzoli 2005).

Other variables that have to be considered are:

- separation, or unbundling, between production and distribution infrastructure;
- the lack of definition or application of catchment areas minimal dimension to contract out, so that economies of scale and density may be favoured;
- the formulation of service contracts based on incentive systems and quality oriented;
- a clear definition of strategic or political guidelines on services management (Dezi et al. 2005, p. 33);
- the existence of independent control authority.

Returning to methodological aspects, we retain that rather than insisting upon a system of rules, usually not applied, that has been demonstrated to be contradictory or at least only contingent, we can focus more attention on what can ensure higher levels of performances.

This involves the necessary definition of a governance model.

This means, traditionally, a set of rules and mechanisms, that can balance different stakeholders interests and expectations, that may potentially be in conflict.

This model is based on several pillars that can then further be declined in variables, measures and indicators, as discussed below.

The variables that define the governance model are:

- the ownership structure;
- the characteristics of the service contract;
- the pricing conditions;
- the controls system.

Compared to the first point, according to “efficiency” theories, the most effective property system is that guarantees lower costs to the companies. In essence, the ideal owners of public services companies shares are citizens and consumers, because they have a great incentive to monitor the services delivered by government or other providers (Hansmann 1988).

For this reason the ideal ownership structure seems to be the public company or cooperative, that are more rational and less imperfect forms of allocation of property for the management of public goods.

So we believe that ownership structure, should be considered as another important variable among the other, like Authorities of regulation or separation between regulation and management functions, to be defined in privatization processes.

We hypothesize that the enlargement of ownership structure could reduce inefficiencies and political influence, achieving higher levels of accountability, cost effectiveness and sociality.

Another hypothesis is that, as already asserted by literature (Padovani 2004), performance contracting, rather than regulatory contracting, is able to conciliate effectiveness and efficiency.

In water sector, generally characterized by long term concession to allow investments return, it could be interesting the introduction of “cost standards” with the subsidy caps definition.

Finally, another variable that should be considered is the governance model definition is the nature of the provider and its purposes. Some studies show, in fact, that non-profit organizations are particularly suitable in contexts where the economic equilibrium cannot be reached by firms without public funding. This depend from the sharing of similar values and interests that avoid opportunistic and conflicting behaviors. In high competitive markets and for essential services contracting out to private firms may represent a better solution.

Regarding fee policies, some studies (Ponti 2003; Ramella 2004) show that financing public services through general taxation is less efficient than full recovery cost technique, especially in a country like Italy with high fiscal evasion. Apart from the resources allocation inefficiency, there is a high risk of creating distortions and penalize, paradoxically, the weakest and low income population, reducing the social equity.

We retain that the full recovery of costs through market price, as already works in other countries (the USA, for example), could present a range of opportunities:

- an improvement of the economic and financial performance of utility companies by increasing direct revenue and reducing costs;
- a more conscious use of the services provided and more realistic value attribution though the assessment of the well known “paradigm” cost-price-value (Bruni 1999);
- higher responsibility of public services companies managers that cannot blame the state for the scarcity of resources transferred.

Also if full recovery cost pricing for public services may find some obstructions in its concrete application its relevance should not be underestimated.

Thus, the lack of market and profit orientation of public authorities and the social relevance of public services cannot justify the low value created or the lack of cost effectiveness (Borgonovi 2001).

The last but not least of variables to be considered is the control system, that have to overpass the old bureaucratic vision to move towards a managerial control, that includes also social (Farneti 1995, p. 209) and relational forms of control, able to improve performances.

A bottom up control, with a clear definition, communication and sharing of political priorities, and reporting systems associated with rewards and sanctioning systems may increase performances. The control of processes rather than exclusively of outcome may be useful especially for services whose output or outcome is difficult to be measured (Landriani and D’Amore 2009).

The definition of these four variables and of performance measures and indicators may figure out a governance model that, according to the direction towards the system moves, can pursue sociality rather than cost effectiveness and vice-versa. In this model equity is considered as a logical extension or as a synthesis of two visions that are traditionally opposed in the practice sociality and cost effectiveness. See Fig. (2.1).

2.4 Performance and Governance Models of Companies in the Integrated Water System

The theme of the evaluation of performance water services companies attracted particular attention in the last months, especially after the recent norms that push towards privatization. In this context and for our research purposes, performance

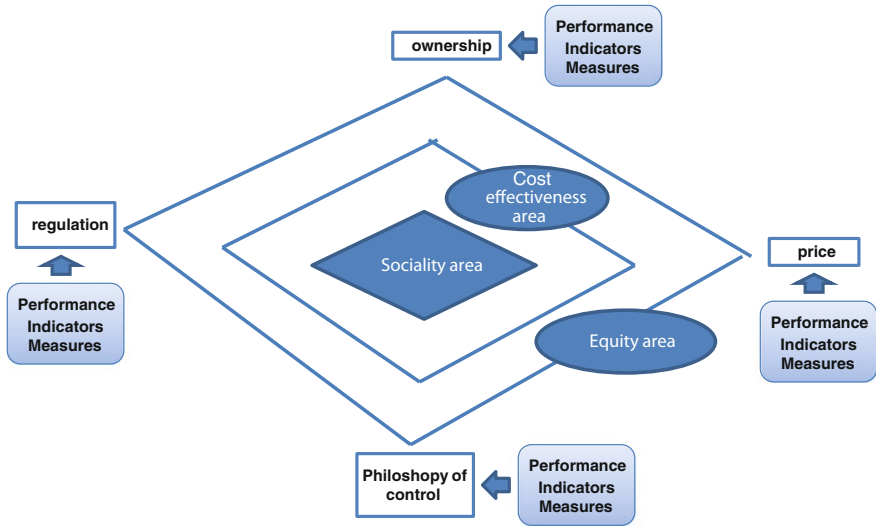


Fig. 2.1 The governance system model

control and measurement becomes crucial, apart from as a guide for management and external reporting, in order to verify the “goodness” of governance models designed by the legislature and adopted by local authorities.

Performance measurement of public sector companies has always been a crucial topic. The evaluation of the PA concerned, in fact, not only the achievement of some public purposes that are intangible and difficult to measure, with the minimum expenditure of resources, but also the way through which these objectives are pursued.

The analysis of this particular control requires as first the identification of the main actors that have to be involved in the water sector governance model as defined by law. In general, local governments play regulation and purchasing functions and private, mixed (public and private) or totally public companies provide water services to population.

Discussing about control and performance in public sector, we refer to the process by which we measure the efficiency and effectiveness, as well as equity, use of resources and goals achievement, aimed at pursuing a “broader economic equilibrium” (defined as the satisfaction of all stakeholders interest) that business management literature considers as an essential prerequisite of all public actions.

The trend towards liberalization of water sector and the private participation to public services provision, favorably seen by communitarian and Italian legislator, make the activity of control and measurement of performances increasingly important, especially in order to prevent that stakeholders interests may be over passed by profit pursuing by private providers or by public expenditure reduction. Since water is a collective interest service, in other words, the priorities of efficiency and cost effectiveness imposed by public debt reduction programs have to

be reconciled with effectiveness and equity values. The progressive process towards privatization in fact may threaten or reduce the social control played by political elections through which citizens express their preferences and reduce the direct control of local governments on processes involved in public services provision and delivery. This makes the monitoring and measurement of output and outcome even more important.

The purpose of this work, maybe ambitious, of trying to relate governance models with performances achieved, requires us a clear definition of the different dimensions of public performances (efficiency, effectiveness, cost effectiveness and economic equilibrium). An ideal model of governance, in fact, is characterized by the possibility of service provider to satisfy all dimensions considered, balancing different stakeholders interests.

An evaluation of efficiency dimension of water services companies and of the governance model adopted implies first of all an analysis of resources used for service delivery. For this purpose, it is possible to define and use indicators of technical efficiency, allocative efficiency and productivity. With regard to this dimension, a right evaluation may include the measurement of output per unit cost (e.g. m^3 of water supplied), labor productivity and distribution system productivity indexes (e.g. relationship between m^3 of water invoiced and the number of employees, or between m^3 of water invoiced and the length of infrastructures). It is also possible to calculate the turnover per employee or per km of network, moving from what is expressed in terms of m^3 to monetary values. Another indicator often considered to evaluate performance is the difference between the water supplied and the water invoiced (Source: Civicum 2009). The gap between the two values may be due to the losses due to hydraulic infrastructure breakage or “apparent” losses due to theft, unauthorized withdrawals or failure of the counters.

Effectiveness, instead, can be considered as the ability to achieve objectives satisfying community needs. It can be internal and external. If you refer to the internal management processes, you need to consider the objectives as defined inside the contracts or agreements and compare the results obtained to them. If we refer instead to the external effectiveness the main object of the evaluation becomes the effect that public services have on users and community. Of course, this second type of effectiveness is less easy to control for the difficulty of measuring outcomes and the lack of a direct close correlation between services provided and user satisfaction and community welfare. To overcome partially this difficulty, the public management literature (Hatry 2001; Poister 2003) suggests the construction of specific proxy. Examples of indicators used for this purpose could be the weighted average maturity and the number of expected and unexpected interruptions in water service delivery, the maximum time of activation, the average waiting time for call centers, average response time to written complaints. Indirectly, these measures would express a measure on user satisfaction, accessibility to services, continuity, transparency and fairness in establishing and managing the contractual relationship.

With the regard to cost effectiveness, the evaluation of the governance model should focus on the ability of local administration to cover production costs (fixed

and variable) with revenues obtained by service selling, creating the conditions for a sustainable economic equilibrium. The cost effectiveness is a necessary condition for all institutions, either they pursue public or private interests.

For cost effectiveness assessment, it is essential, therefore, the fee or price established for the public service: higher is the percentage of cost paid by user, as it is for market services, greater is the level of profitability achieved. A measure of cost effectiveness water services companies may be the percentage of costs covered by the fee per m. One of the objectives of Italian legislator is to increase the level of participation of users to water services cost, establishing a full cost recovery policies.

Regarding the economic equilibrium, as stated above, it should be considered in a broad sense, i.e. as the ability to meet all stakeholders demands, rather than the ability to generate and make profits. In the governance model described (including the local authority and provider company), in fact, the comparison between costs and revenues is not so relevant, but it is still important for assess economic equilibrium reached. There is, therefore, the need to use qualitative measures for assessing the economic equilibrium and the creation of value.

This concept of economic equilibrium allows to over pass the typical trade-off between social equity and economic efficiency which oversees the public choices. In these terms equity in water sector results in the capacity to generate a network of high quality services throughout the country, reducing the “socio-economic disadvantage” in society, activating the recovery and promotion of the disadvantaged classes, thereby improving the conditions of equality, democratic security and protection of stakeholders. This approach clarifies the role of social relations in the economic equilibrium, clearing it reference to the method of redistribution of the value created by public institutions. It should be noted however, that in all situations, not indeed rare in the PA Italian reality, where a short-sighted approach to prevent independent coverage of social costs determined negative consequences for the economic equilibrium. Under these conditions it becomes difficult to ensure efficient and effective services, and the social purpose risk to damage financial and economic equilibrium and autonomy of providers. These considerations reveal the necessity of a governance model whose orientation to sociality do not prevent from economic equilibrium achievement.

2.5 A Comparative Analysis Among Different Countries

For the analysis of the governance variable exposed above, we examined four case studies (Italy, Spain, France, Germany) emphasizing the ownership structure and the pricing strategy (full cost recovery vs. partial recovery) (Table 2.1).

Instead of the traditional dichotomy public versus private we consider the concentration degree of ownership. He associate to multiple shared ownership (as public companies, multi-utilities, joint ventures) the attraction and satisfaction of

Table 2.1 Comparison of average expense per family in 2007 per 200 m³ per year

Comparison of average expense per family in 2007 per 200 m ³ per year					
Country	Main local government supplied	Provider	Population served	Annual average expense(€)	Average unitary cost (€/m ³)
Germany	Berlin	Berliner Wasserbetriebe	3,469,000	968.37	4.82
France	Paris	Veolia water—SEDIF	4,155,585	733.66	3.43
Spain	Barcelona	Sociedad general De Aguas de Barcelona S.A	2,828,235	339.31	1.95
Italy	Milan	Metropolitana Milanese s.p.a.	1,336,899	110.66	0.55

Source Bluebook 2009

several interests and to highly concentrated capital (both public or private) the influence of to address a single objective.

For the price variable, we identify a continuum to which extremes we find two categories: social or political price, that is mainly oriented to the containment of direct costs paid by users rather than from the collectivity through general taxation and full cost recovery price (Cavaliere 2005), able to cover the costs and eventually to generate profits, preserving autonomy and economic equilibrium.

In our country, after 16 years since the issue of “Galli Law”, through which started the initial process of modernization and reorganization of the water sector, many problems are still unsolved.

The institutional reorganization of local authorities in ATO (Optimal Territorial Area), that it was a crucial point of the reform for the scale economies related, did not take place in most of underdeveloped areas of our country. Given this situation, legislator started to issue a series of new norms aimed at increase private participation in this industry, but the path toward privatization is still long. The latest norms issued is the D.L. 135/2009, according to which by the end of 2011 municipalities and provinces that manage water services directly have to contract out through a public competitive bidding procedure. Instead, the mixed public–private partnerships where the private party has operational functions have to be contract out at the expiration date of the contract, and, finally, listed companies have reduce the public ownership to the 40 % by 30 June 2013 and 30 % by December 31, 2015.

In Spain, Law 7/1985, August De Bases de Regimen Local, reformed in 2003, establishes that that the water supply, purification of water and sewer service go under responsibility of municipalities within the time allowed the law of the State and Regions in Spain. In particular, Article. 13 of the Act establishes three principles:

- management units, integrated management, fight against waste, devolution, decentralization, coordination, effectiveness and user participation;
- respect for the unity of the river basin, hydraulic systems and the hydrological cycle;
- compatibility of the public management of water with land-use, conservation and environmental protection and the recovery of nature.

The delegation to the private sector is growing and there are examples Lyonaise des Eaux that is historically present in Barcelona since 1881 in association with the local savings bank and the group of SGAB (Aguas de Barcelona), which distributes water in Barcelona and other cities, as well as manage some highways and refuse collection. The largest private group in this country, is the de Fomento y Contratas construcciones, FCCSA, a company operating in public service, which specialized in the field of urban environmental services. Finally, Generale des Eaux, the French with some English and American Water Company, have joined forces with Spanish companies to gain the smaller market segments.

However, in Italy as in Spain there is a tendency for the public management of water supplies. In particular, Fig. 2.2 shows a concentrated ownership, which means that the expectation for in-house, 48 %, followed by private ownership (40 %) and that fraction (11 %) only 1 % did not declare their form of ownership. Unlike our country, concentrated ownership is much higher (more than 10 % points), as well as the private, the opposite case, however, the fraction differs 9 % points for Italy.

The Spanish model is characterized by the spread across the country systems of resource management “wholesale”, which consist of a complex and artificial system designed to control runoff and transfer between river basins. The services focus on urban water distribution, while the upstream stages of the supply chain are usually administered on a regional or basin. As in Italy, in Spain the urban water services is the responsibility of municipalities and when it fails to be totally self-contained resorts to wholes le supply systems or, alternatively, other territorial entities of the higher level (Autonomous Communities and hydrographic confederations).

Fig. 2.2 Water management in Spain source: national survey VIII AEAS, 2002 data

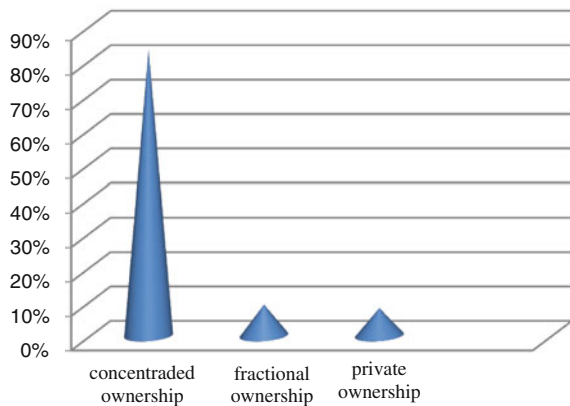
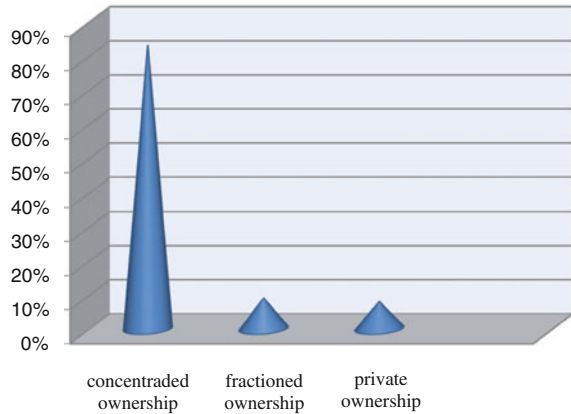


Fig. 2.3 Water management in Germany source: estimaciones propias de agua industry (BDE) y ATV, Edición: 2001



The same approach of Spain, is also confirmed in Germany, where it notes that adopted the traditional form of management is “direct public hall”, and only since the late 70s were admitted to alternative models, which provide involvement of the private sector. Sewerage and sewage services are conceived as sovereign and non-delegable responsibility by the public entity, which can secure the cooperation of the private entity but remains fully accountable to higher authority, the power utility has traditionally been conceived as a commercial service in which the monopoly of the municipality is exercised in fact.

The Fig. 2.3 shows a prevalence for concentrated ownership, with a percentage well above 83 % of our country (34 %) and Spain (48 %), followed by fractional ownership (9 %) and private (8 %).

In terms of water, the Federal Law of 1957 (Wasserhaushaltsgesetz-WHG) major powers delegated to the Länder. These monitor the effectiveness of the management of water services, which is managed by local communities. For constitutional provisions, the German water service, found its place in the “citizenship rights” (Daseinsvorsorge). This concept has the practical effect of the investing public entity responsible for ensuring this right, therefore, the transparency of related information management is seen as a primary requirement.

Beyond the administration, the German services are characterized often enough for a joint exploitation of various public services (electricity, gas, heating, etc.) within the municipal company named “Stadtwerke”. This form of group activity exists mainly in big cities such as how to manage Eigengesellschaft, except for Berlin, which maintains a mono-utility business model. Italy confirms the orientation of Berlin even if the propensity to specialization model of service is not confirmed uniformly throughout the country: the center-north, in fact, most managers are multi-utility (e.g. A2A, Hera, iris, Acea), while the South is the predominant form monoutility (Ariin, Gori, Salerno Systems, Lucan Aqueduct, Aqueduct Pugliese).

In France, finally, the expectation of the water service is characterized by the dominance of the private public, in fact, private property represents about 75 % of

the forms of management. There are also forms of concentrated ownership but involving only a small minority of local authorities, essentially rural. The delegation to the private not born of a strong liberal ideology but by the difficulty to cope with large investments needed for modernization or restructuring of the network. It obvious that the comparison shows a high prevalence of concentrated ownership, except for France dominated the private.

Regarding the price, it is contractually defined by the municipalities in all four countries examined.

In Italy, rates are composed of four items: mains, sewer fees, cleaning fees and flat fees. They differ from region to region, in fact, for example, we find the highest average tariffs Tuscany, followed by Apulia, Umbria, Emilia Romagna, Marche, Basilicata, and finally from Sicily. Clear differences also exist within the same region, such as in Sicily, Agrigento (most expensive city of Italy with € 445,00) and Catania, where a detachment of well incurs € 258,00.

In Barcelona and Paris, however, the calculation of the tariff shall be considered for a fee that affects all water withdrawals within the basin. For domestic purposes the fee is calculated for each municipality, according to seasonal and permanent population and the same is paid by the consumer to pay the water bill. For industrial consumption, however, the rate charged per cubic meter of water taken is 1.10 times higher.

In Berlin, there is no real price structure (fixed and variable), nor is it established whether charging for water services in a unified way (a single fare for the whole service) or to separate the different components of water supply, sewerage and drainage. They are only determined on the basis of certain principles. Moreover, if the operator is public, rates (Wassergebühren) are controlled by the respective administrative courts (Verwaltungsgericht) if it is private, however, supervision of prices (Wasserpreise) have supervisory authority (Kartellbehörde).

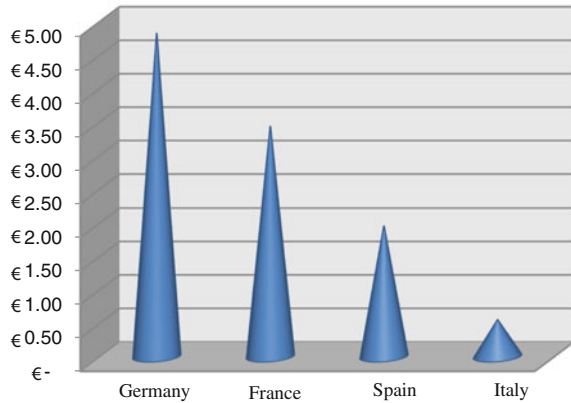
The SMAT Torino, under a program of international cooperation between operators of water services, notes the rates of waterworks, sewerage and sewage from different countries. The latest survey developed to allow comparison with expenditure compared with the cost of Italian life in major foreign cities in 2007 for a typical consumption of 200 m³/year.

That said, you may notice that Italy stands as the most “economical” in terms of expenditure per pupil, and cost. The figure, however, must not mislead as such political price can not cover the necessary investments for maintenance and modernization of the networks.

Barcelona, however, apply a semi-remunerative price in the sense that can only partially cover the financial needs (60 %). Instead, Paris applies a remunerative price which includes a series of taxes and fees aimed at modernization of sewage and sewerage. This price not only provides coverage of investment, but also generates profits. In this system, however, there are no provisions of resources for anti-pollution policies or against the urban sewage in times of rain.

And Berlin, like Paris, apply a remunerative price, which places it as the most expensive among the cities examined (Fig. 2.4). Due to the high price is the attitude of network losses involving continuous renewal of infrastructure, and this

Fig. 2.4 Rates compared
(average cost unit)



is added an excessive technological equipment, which is often cited as an example of inefficiency.

Coming, finally, control, left Italy to the regions and the municipalities the responsibility of the same. In particular, there is the National Commission for supervision of water resources (Co.N.Vi.Ri) who is entrusted with the role of ensuring compliance with the principles of the law reform of water services, with particular reference to efficiency, effectiveness and economy of service, regular determination and regular adjustment of tariffs, and to protect the interests of users. Other means of control is the Charter of service that sets the principles and criteria for service delivery and is an addendum to the supply contracts. This tool ensures the participation of citizens recognizing the right of access to information and opinion on the work of the manager. In carrying out these tasks the A.T.O. observes the principles of equality, impartiality, continuity, participation, efficiency and effectiveness, clarity and understandability of the messages. The time control is also explicitly specified in the Charter of the service where AATO to verify the quality of service provided, the degree of customer satisfaction, and any room for improvement, plays with the active involvement of its users periodic checks on quality and efficiency of services provided.

Paris is not explicitly provided for a provision on the subject of control by the operator of the field, rather, we see the introduction by the local government, various financial penalties to which the subject is the *fermier* if it appears to be defaulting in submission of annual reports or other information.

In Berlin, however, the regulatory framework for the water system is extremely rugged due to high public authorities attributed the *Laender*. In addition, economic instruments (taxes and levies on discharges), adopted in France, there are in this country.

Finally, in Barcelona, the monitoring mechanism is guaranteed Catalan Water Agency (ACA) and the Committee of prices. The first, which has expertise in environmental manage the operations of non-municipal area and cares about the allocation of financial resources, the Committee, however, the task of defining the rates at its discretion.

Paris was one of the first in the race for privatization in 1984 by Mayor Jacques Chirac. The system was largely based on a contractual setting, the main competitive element was represented not by the competition between companies, but the threat of return to public management or change the type of relationship with the private scheme.

The current trend is coming to Paris *remunicipalization* services, or at least to greater accountability by public entities.

One of the reasons that led to a rethinking of the existing management is the systematic increase in prices is not accompanied by an improvement in services, but by a long series of abuses, inflated prices, corruption and services obsolete. Therefore, the current mayor has decided not to renew contracts for water distribution and billing to Parisian French multinational Veolia and Suez expires on 31/12/2009.

In Berlin, as in Germany, the water system is usually praised for the high levels of performance and the high propensity to invest. In contrast, however, it is scarcely efficient because of high operating costs due to a continuous renewal of networks.

In Spain, formerly the EU, the water industry was in serious conditions of backwardness, with performance levels rather inadequate management mostly bureaucratic and technically unprepared, levels of cost recovery is perceived. To date the system is in developmental stage and there is a degree of market concentration that allowed it to close, largely, the gap with other countries.

In several cases examined, even with all the limitations of such an analysis, then do not show a frame of reference “optimal”, but, again, the problems related to different variables in the model of governance outlined: social tariff or price-reward, information asymmetry between manager and client, direct public intervention or delegated to the private role of monitoring, etc.

2.6 Issues

The objective of this work, as we tried to argue in these pages, was to provide further discussion of ideas on how firms management of public services, particularly water services. Appear on two major issues:

- the transition from a vision based on outcomes expected from the privatization process to a perspective based instead on the process of outsourcing and the conditions (internal and external) in which it takes place in reality;
- construction of a governance model for the water sector, which exceeds the conceptually sterile ideological public/private or contradictory regulations on procedures for the award (race/in-house).

It is therefore to refocus attention on companies (Gilardoni and Antonioli 2008) and performance measures developed by them, as a pre-condition for the balancing

of potentially conflicting interests that traditionally concern the management of a vital commodity as water.

It is believed that the complex and delicate balance between cost and equity, between efficiency and effectiveness, including quality of service, waste reduction and expansion of access to water, more properly relate directly to business plan analysis, face the determination of a model of government-oriented economic balance over time.

In this sense, should be considered some variables that typically characterize these processes, as they have settled in the years in various local contexts. Some of them are subjective limitations such as lack of skills or private nature of other objects, such as regulatory constraints, no-liberalization, the weight of investment, the rigidity of labor, etc.

We therefore believe that these characteristics arise as real input process outsourcing or privatization, determination cascade and affect the outcomes expected. Therefore an overview of the case could contribute to reduced complexity in action, returning attention to a single step at a time, place and contradictory summaries of mainstream practice.

Moreover, this method would allow the construction, also shared a network of indicators and performance measures, and quantitative, physical or monetary, analytical or proxy to represent an ideal setting in which to plan and monitor the relationship between local authority, a company managing the service and other players.

This “framework”, probably more stable over time, although dynamic, compared to the mood or legislative turnover in political management, would, moreover, as for the detection and transfer of best practice management.

Finally, be a land of far more practical comparison between the territorial authority and the political sphere, can potentially increase understanding of needs and the ability to identify priorities, to define a clear mission, and to stimulate greater participation therefore less effective.

All this does not resolve the delicate issues of balance between the various stakeholders involved, especially in the absence of significant field testing, which is the main limitation of this work, but then refers to future guidance from empirical reality.

In this way, i.e. by increasing the knowledge inherent in the typical problems of autonomy and corporate balance (Cavalieri 2010), it is considered that, especially from a symbolic resource such as water, also Italy is to move closer to a better understanding of the subject, as found in other countries surveyed and that, at the same time, can decrease the risk of water for a few, as feared by the public.

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