

UNIVERSITY OF GOTHENBURG SCHOOL OF BUSINESS, ECONOMICS AND LAW

Graduate School

M.Sc. in Innovation and Industrial Management

M&A processes in the Italian multi-utility industry: accomplishment of a political project, chance for growth and value creation.

An industry analysis starting from a case study of Acea S.p.A.

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> Double Degree Program, LUISS – University of Gothenburg A.Y. 2016/2017

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A mio nonno Raoul ed ai miei genitori Mara e Guido This page intentionally left blank

Abstract

This M.Sc. Thesis aims to investigate on the reasons at the basis of the M&A operations that, in the last few years, are radically changing the structure and the dynamics of the multi-utility industry in Italy. Through an initial inquiry of the path that has gradually brought to the current industrial organization, and a following insight of the present scenario, the Research sets the foundations to better understand the subsequent empirical study and final analysis. The features actually characterising and affecting the industry are explored starting from a case study of the Rome-based multi-utility Acea S.p.A., which however constitutes only a sub-section of the Empirical Findings. As a matter of fact, the latter analyse at the same time both the internal forces – as the other main players' resources, capabilities and outlooks – and the external factors – referred to as the Italian political, legislative and competitive framework as well as some global macro-economic trends – which directly influence and guide the M&A dynamics in the Italian multi-utility industry. The combination of the historical and theoretical framework with the findings from the empirical study eventually allows to end up with the work's outcomes regarding the main drivers of the type of operations object of the Research, which are provided and construed at the end of the paper.

Keywords: Regulated business, Regulated industry, Municipal companies, Liberalization process, Multi-utility industry, Italian multi-utilities, Business mix, Local utilities, Public utilities, M&A process, External growth, Value creation, M&A trends, Industrial policy, Political interference, Industrial organization, Market structure.

Acknowledgments

The present Thesis was developed in summer 2017 at the end of both my M.Sc. in Management at LUISS and my M.Sc. in Innovation and Industrial Management at the University of Gothenburg, which together constitute the Double Degree Program between the two cited Universities.

I would like to express my appreciation to all individuals who contributed and made this Research possible.

First of all, I would like to direct my sincerest gratitude to the supervisors Prof. Gianfranco Di Vaio from LUISS and Prof. Evangelos Bourelos from the University of Gothenburg for all the valuable inputs and guidance they provided me throughout all the Thesis process.

Special thanks also go to the "interviewee", already CEO of Acea S.p.A. in the past, which, for the position he currently holds, has requested not to be mentioned directly.

Furthermore, I would like to take this opportunity to thank the current management team of Acea S.p.A., particularly in the persons of the CEO, Eng. Stefano Donnarumma and the External Relations Director, Mr. Massimiliano Paolucci. Even if eventually it was not possible to have a direct collaboration for the development of this Research, I thank them for the time they dedicated me anyway.

Last but not least, I am grateful to Equita SIM for the availability they have demonstrated in helping me with some tough points of this work.

Many thanks, Massimiliano Casellato

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1. Introduction

This chapter is aimed to introduce the reader to the purpose of this M.Sc. Thesis and to provide an insight of the concerned topic.

Public utilities represent one of the key industries in the development of a society. It is easy to perceive, in fact, how branches such as the ones of electricity, natural gas, water management, waste management and public transport constitute factors that have a profound impact on citizens' quality of life. The public service nature, typical of the utilities sectors, makes sure that this is one of the industries in which the institutional, governmental and (above all) regulative authorities are most involved. It has to be said that public utilities have been historically managed in monopoly regimes, not because they were all actually natural monopolies, but because such they were considered in fact. Only afterwards it was realized that this reasoning was partially inexact, and thus the wave of privatization and liberalization came. At that point, it became evident that, as it had been important to introduce elements of competition in these sectors, in the same way it was essential to safeguard their abovementioned public service nature.

More than 25 years have passed since the first law to open local utilities markets and more than 15 from the Decree 79/1999 (better known as "Bersani Decree"), which (together with the "Letta Decree" 164/2000) gave the strongest push to reconfigure the entire Italian system based on former municipal companies. Over the years, the experience of the major international groups, which in the meantime consolidated their position on the domestic market and expanded to foreign ones, was the goal to which the Italian players were aiming to; in particular, a constant benchmark has been represented by the history of RWE AG, the second largest German electricity producer, which today supplies a total of some 23.4 million customers in Germany, the Netherlands, the United Kingdom and Eastern Europe, and was born as a union of municipal companies.

From the long and complex process of aggregation and growth of local public operators, during the Nineties, the *multi-utility* business model has consolidated: the latter refers to the structure that utilities companies, whether public or private, national or local, assume at the end of a gradual convergence process, which leads them to simultaneously operate in several public utility sectors. These companies appear heterogeneous among them for their original history, business profiles, inter-sectoral integration levels, strategic horizons, internal organization and corporate governance structure. The reasons for these multiple differences, even though they are consequence of the dealing between the most important shareholders, hide interesting evaluations in terms of the territorial features of the business, the ability and the possibility to realize synergies between the production lines and the different territories, as well as of the relationship between ownership and management.

The main multi-utility players can reasonably be considered the most important outcome of the concentration process occurred among the municipal incumbents. The rise of this business model has determined both the overcoming of the local and regional geographic boundaries that characterized the former municipal companies and the original mono-business configuration. The new multi-utility realities, landed to the stock market, raised the support of markets, aggregated private investors, and began acquiring local businesses. As a matter of fact, alongside large (inter)national players such as Enel, Eni and Edison – who have long established a multi-business strategy and, above all, an aggressive penetration on international markets – it is possible to notice the presence of four companies in the Italian context, namely A2A, Hera, Acea and Iren, leaders for turnover and company size and arisen from a development process of the former municipal companies operating in the vast metropolitan areas of Milan/Brescia, Bologna, Rome and Turin/Genoa.

A step below, from a dimensional point of view, local and provincial industrial players emerge: these groups are grown by aggregating utilities services without a real geographic penetration capacity on new national markets. Statistics and balance sheets data also show the strong territorial gap that marks the Southern industrial realities, smaller and less dynamic than those active in the Centre-North territories. More generally, there are still many (former) municipal realities that produce deep systemic inefficiencies. These last considerations, in particular, constitute the starting point for the research work that has been developed in this Master Thesis.

1.1 Problem definition and Research Question

The strategy and industrial policy's alterations in the local public utilities industry have often been influenced by factors standing outside the businesses: for example, changes in the market structure, macroeconomic factors, political decisions and pressures (at local and national level). The latter is an aspect that – as will be seen – is historically (and inevitably) intrinsic in the utilities industry. On the other hand, with the intensification of competition induced by the progressive deregulation of these markets, public utilities firms have responded by modifying the structure of their business in an attempt to limit the fall in profit margins previously made under monopoly conditions, as well as to exploit activities with higher returns. Therefore, aggregation processes and business management cannot be considered as exclusive drivers of transformation in a competitive environment: they should rather be understood as responses to the development of factors that are not directly controllable by companies themselves.

Before the 2008 crisis, and then again in 2014, the discussion on the arrangement of local public utilities revolved around the project of the large multi-utility company, national and international leader, resulting from the integration between large local holdings. Local governments were exhorted to overcome cross-cutting (ownership) rights on the utilities governance composition and to open up the shareholdings to new investors, so that Italy (like Germany with RWE) could benefit from a large industrial entity capable of solving one of the main limits of Italian public utilities markets: the operators' fragmentation and poor capacity to support investment programs tailored to the needs of the Country. Although this is a debate that has occurred periodically in occasion of the major system operations, at the end it has always been set aside (so far), in a context that sees the main players moving (and growing) more and more through small acquisitions rather than with large merger

operations. This process is also due to the territorial roots of the companies themselves, determined both by the presiding over local businesses (local distribution of electricity and natural gas, water and environmental services, as well as cogeneration) and, above all, by the presence of public shareholders within the companies' equity. However, this latter aspect is not only tied to the interest of the public shareholder in dividend recovery, but also to the economic role of the utilities companies for the local systems, as well as to their ability to produce massive investment volumes on their reference territories.

Given the historical fragmentation of the Italian utilities market, the great development potential of the major national players, within the same territorial markets in which they are already present, is evident; macro-regional industrial consolidation policies can ensure remarkable results, leveraging local synergies between the various business chains. However, the many differences that have marked M&A processes among industrial operators over the last few years push to question the optimal industrial and geographical dimension for the local multi-utility market leaders in Italy. It is also reasonable to ask whether the current industrial-territorial configuration of A2A, Hera, Acea and Iren constitutes the arrival point of the former municipal companies' long development process or whether the impulses recently given by the Italian Government – also in response to "Spending Review" constraints – provide the basis for a significant strategic reorganization of national operators. Through an initial historical-regulatory path of the industry, a subsequent analysis of its current configuration and finally an empirical study, the overall work aims to answer the following Research Question:

"What are the causal role and the underlying drivers of extraordinary finance operations in a (politically) regulatory-influenced industry such as the local public utilities in Italy?"

1.2 Research focus and delimitations

Throughout the initial part of this research, the purpose is to interpret the conditions that have favoured the rise of different multi-utility realities in the Italian local public services markets, as well as to discuss the different business scenarios and development strategies. The criteria at the basis of the choice of the "target" companies that have been analysed are multiple: alongside the dimensional question – which is undoubtedly important –, in fact, other aspects were also considered, such as the business mix, geographic location, historical heritage, and link with the reference territory. At the same time, the four recognized national leaders represent the unique cases of listed multi-utilities companies at present, and this aspect was applied by the researcher as criterion to narrow down the focus of the Research Project, in order to eventually ending up with conclusions as specific as possible. However, as will be partially seen, there are old and emerging realities in the industry that are consolidating in macro-regional areas, helping to redesign a new business map and reducing the fragmentation of local operators: these players will possibly be the subjects of future researches.

In order to develop an analysis that, in answering the Research Question, at the same time could be also of real managerial application and interest, interviews have been conducted with a prominent executive in the utility industry, already CEO of the Acea Group in the past; for the position he currently holds, however, he has requested not to be mentioned directly. Anyway, that interviews constitute the core of the empirical comparison part of this work. Even if it results as a single case to the effects of the final analysis – which may prove to be overly subjective –, the author of the present research has considered as an added value to insert the results arisen from the cited interviews, given the interviewee's high expertise in the industry together with his current alienation from the industrial subjects analysed in this paper.

1.3 Thesis disposition

The present M.Sc. Thesis is organized in six chapters as follows:

- Introduction. This first chapter is aimed to present to the reader the purpose of the overall work, as well as to explain the significance of both the Research Project and the Research Question to answer.
- 2) Theoretical Framework. The second chapter opens with the historical-regulatory path of the industry, from the early 20th Century until nowadays. The political-normative aspect as already mentioned above is a cornerstone on which the dynamics of the industry in question evolve over time, and for this reason it has been included by the researcher as a stronghold of the theoretical reference basis. Subsequently, the dynamics of the transformation of local public utilities companies, which gave rise to large multi-utility groups in Italy over the last 15 years, are presented together with an analysis of the current positioning and growth outlooks of the companies themselves. Finally, the focus is shifted to the analysis of the existing literature regarding M&A as a tool for altering market structures with particular reference to the Industrial Organization field.
- 3) *Research Methodology*. In the third chapter, the research strategy, design and method employed to carry out this work are described.
- 4) Empirical Findings. The fourth chapter regards the collection of data obtained through both the author's study of M&A operations in the Italian multi-utility industry and the interviews conducted. The overall chapter presents an analysis of the Acea case put in the wider context of the industry trends.
- 5) *Analysis*. In the fifth chapter, the theoretical overview and the empirical findings are collectively analysed with the goal to extrapolate relevant information.
- 6) Conclusions. The final chapter presents the outcomes of the overall work, answers the Research Question and discuss about possible future scenarios for the Italian multi-utility industry.

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2. Theoretical Framework

This chapter will provide the reader with a literature review concerning firstly the historical-regulatory path of the Italian multi-utility industry, secondly the analysis of the current positioning and growth outlooks of the main players in the Italian market, lastly the previous studies regarding M&A as a tool for altering market structures. The underlying aim is to give an overview not only on the theoretical issues at the basis of this paper, but also on the aspects that over time have strongly affected the industry in question.

2.1 From the municipal companies to the multi-utility model¹

The Italian history of the local public services constitutes a phenomenon that is far from recent. In fact, it began to be considered a crucial matter at least since the beginning of the 20th century: in that period a very high growth of local public companies was achieved through processes of *statalisation* or *municipalisation* of

¹ This section has been developed on the basis of previous studies carried out by this paper's author regarding the history of the utilities industry in Italy. For this reason, the development of the text does not contain any particular bibliographic references except those referring to specific law texts. Anyhow, for further details, please refer to the following works:

⁻ Cartei, G.F., Il Servizio Universale, Giuffrè Editore, 2002

⁻ Curzio, A.Q., Fortis, M., (a cura di), *Le liberalizzazioni e le privatizzazioni dei servizi pubblici locali*, Il Mulino, 2000

⁻ Iacovone, D., I servizi di pubblica utilità tra Stato, mercato, regolatore e consumatore, Il Mulino, 2014

Mele, R., Parente, R., Popoli, P., I processi di deregolamentazione dei servizi pubblici – Vincoli, opportunità istituzionali e condizioni operative, volume II, Rassegna di contributi, Maggioli Editore, 2004

⁻ Militello, La municipalizzazione nel diritto pubblico fascista, Bologna, 1941

⁻ Mussari, R., L'azienda del Comune tra autonomia e responsabilità, CEDAM, Padova, 1996

⁻ Pisaneschi, A., Dallo Stato Imprenditore allo Stato Regolatore e ritorno?, G. Giappichelli Editore, Torino, 2009

⁻ Pischel, G., *La municipalizzazione in Italia ieri, oggi, domani*, Confederazione della municipalizzazione, Roma, 1965

⁻ Tessarolo, C., Trasformazione delle aziende speciali in S.p.A., Edizioni Edilizia Popolare, Roma, 1999

⁻ VV. AA., Guida al contratto di servizio nei servizi pubblici locali, D'Anselmi Editore, Roma, 1999

⁻ VV. AA., La Costituzione della Repubblica nei lavori preparatori dell'Assemblea Costituente, vol. VI, Roma, 1970

⁻ Zanetti, G. (a cura di), Storia dell'industria elettrica in Italia. Vol. V. Gli sviluppi dell'Enel 1963-1990., Bari-Roma, 1994

activities regarding the utilities services. Moreover, the latter were processes common to see in most European countries exactly in the early twentieth century. The reasons behind these processes are to be found firstly in the "diseconomy" that at that time characterized the utilities industry. But, above all, the latter needed enormous investment in infrastructure, which became indispensable to respond to problems caused by urbanization processes. In fact, it was very unlikely, if not impossible, to carry out such works by private companies. The economic backwardness of the population prevented the payment of the service at market prices and hence an adequate remuneration for the investment. It was therefore inevitable that the State was to take over the management of public services: the public enterprise could in fact offer a possible satisfaction to collective needs at a "sustainable cost". From the beginning, however, there was a political motive given that the Communes also saw the possibility of financing municipal budgets with the large revenues associated with the management of services.

2.1.1 The Law 29 March 1903 n. 103 on the municipalisation of local public services

The process of direct assumption of the utilities by the municipalities officially began with the emanation of the law 29/03/1903 n. 103. The latter favoured the first wave of municipalisation until the Great War, so that precisely that period (during which Giovanni Giolitti was Prime Minister of the Italian Government) was termed "the golden age of municipalities". The law 29/03/1903 n. 103 on local public services established that the municipalisation of services was a faculty left to the municipalities, but provided, in parallel, a series of controls and constraints. Actually, the legislation did not define when an activity could be considered as a public utility, but listed the services of which the municipalities could assume the direct management: this listing, however, ended up being a limit to the area of intervention of local authorities, also because the control bodies tended to discourage possible extensions. In addition, the company model defined by the law was devoid of legal personality and therefore did not have the property of its own resources and assets:

this led to a drastic reduction of its autonomy and its functionality. Furthermore, the law governed the procedure which had to be observed by the municipality in order to undertake the management of the service: this decision could be adopted only after the technical and economical convenience of the specific municipalisation was demonstrated.

The application of the law 29/03/1903 n. 103, with the features just described, made the municipalisation of the service, often, not the rule but the exception. But, above all, the industrial characteristics of the municipal companies were inevitably affected by their strictly public nature. They took the form of mono-service production units, operating generally in territorial areas corresponding to the administrative ones of the municipalities: the consequence was the emergence of companies which were "organic" to the local body and only functionally separated from it. This process had negative implications also from a financial point of view. In fact, the companies often produced losses that had to be covered with the extraordinary share of municipal budget spending.

2.1.2 The Royal Decree 2578 of 15 October 1925 and the fascism's years

The fascist era, placed halfway between the liberal and the republican ones, represents the intermediate stage of the municipalisation experience in Italy. With the end of the Great war and the advent of fascism, a phase of stasis (if not regression) was opened for the municipalisation movement. In fact, during the 1920s, the number of municipal companies declined greatly, as demobilizations and re-privatizations (especially in the electricity sector) were recorded everywhere, while other municipalisation projects were blocked.

Furthermore, during those years, the reform of the aged law of 1903 was promoted. With the Royal Decree of 30 December 1923, no. 3047, two important measures were introduced:

1) Provinces also, within certain limits, could take up some public services;

 the Government was empowered to bring together and coordinate in a single text the entire discipline of the matter, also with regard to rules dictated subsequently the law of 1923.

Following this second point, the Royal Decree no. 2578 of 15 October 1925 was issued: it contained the Consolidated Text on the Direct Taking of Public Utilities by Communes and Provinces, and it constituted the reference discipline of the matter for decades, even after the fascist regime. As art. 1 of the Law 103 of 1903, so the R.D. 2578 of 1925 confirmed the non-standard but exemplifying value in the indication of the public utilities of which the Communes could undertake the direct management, given the persistence in the impossibility of establishing an absolute definition of public service, particularly to the effects of municipalisation. Moreover, the Royal Decree 2578/1925 provided two different possibilities for administering the municipal services, namely under "direct management" (i.e. by the same administrative bodies of the commune) or by granting them to private companies.

It is important to notice that municipal companies, despite being part of the municipality's organization and not having legal personality (which involved the municipality's responsibility for any liabilities), enjoyed a considerable administrative autonomy, so much so that they were in possession of the capacity to carry out all the legal shops necessary for achieving their goals and to stand trial for the actions that resulted.

Once the short-term liberalist economic policy was over, the growing establishment of the fascist government in the economic sphere first led to an attenuation of hostility towards municipalisation, and then to an increasing attention to the activities regarding the local public services. The latter, in fact, were part of the list of instruments of the "consensus machine" from which the regime's propaganda apparatus expected a high productivity.

In the 1930s, Italian Municipalities owned 82 electrical companies, and some of these were a conspicuous source of profit. All in all, there were 132 municipalised enterprises with over 8600 employees.

2.1.3 The discipline of public utilities in the Constitution of 1948. The new mass-consumption society. The settlement of political parties in the local municipal companies.

With the end of World War II, the republican season of the municipalisation history was officially opened. From the regulatory point of view, the most important novelty of those years was undoubtedly the entry into force of the Constitution of the Republic (1948), particularly with regard to the political-economic indications contained in the articles of the so-called "Economic Constitution".

During the debate held in the Constituent Assembly, the outlines for public services, in the more general framework of the rules on economic relations, came out as a representation of the agreement reached between the various political and juridical assumptions that preformed them. In the end, the conjunction point was found in bringing together the possibility of State intervention with the protection of the private economic initiative: a union that created a Constitution in which the right recognized to the private enterprise is never disconnected from a vision projected on the general interest. Undoubtedly there is neither market nor competition in the Constitution as elements of consumer's protection against the private monopoly. But there is, however, the fear of the latter, especially if of large dimensions. As it is possible to read through the lines of art. 43, in fact, the constitutional response to that "spectre" (of the great private monopoly) lies in the belief that, in the historical and economic conditions of the time, the natural forces of the market would not have been able to break private monopolies: only the State intervention could actually solve the problem.

The years following the entry into force of the Constitution were characterized by profound political, economic and social transformations linked primarily to reconstruction, as well as the accelerated expansion of industry and the growth of large cities towards a metropolitan dimension: Italian society was progressively starting to mass consumption. Municipal companies soon had to deal with the consequences of this era of radical change. The problem of adapting public utilities to the new dimension of the population and the new consumption structure created serious problems to local administrations and of course to the same companies that

managed these services, namely the municipal ones. The latter, in trying to cope with new emerging service needs, in some cases began to implement new investment plans, pursuing the further implementation and extension of networks: this fact, added to the progressive growth (at times uncontrolled) of costs (primarily the one of labour), was the foundation of the budget deficits of municipal companies, which then became quite significant (as will be seen in the later years).

Moreover, in the 1960s, the nationalization of the electricity sector struck the most economically important (i.e. with the greatest budgetary gains) business line of all the municipal companies: the survival of electric companies was put in doubt since the continuation of their activities was subject to a concession decree (and, as such, always revocable) by ENEL. However, the most vital and territorial-rooted businesses survived.

Lastly, it is important to notice that in the cited historical period, since democratic conditions had been restored in the republican era, the administration of municipal companies began to become the prerogative of political leaders linked to the majorities that ruled the municipality rather than of technicians and managers. This phenomenon, also due to the political climate of the Cold War years and the net ideological divisions that followed, went on to accentuate: boards and management teams of the municipalised enterprises were often composed by individuals increasingly linked to the "apparatus" of the political parties. The political instrumentalisation of municipal companies, which began in the fascist era, persisted even during the republican period.

2.1.4 The period 1970-1990: analysis of the sector's structure before the liberalization process

From the end of the 1960s, the system resulting from the process of municipalisation increasingly manifested its limits and the pattern of regulation on which it was founded ended up being an obstacle in achieving efficiency. The clearest manifestations of this involution were the insufficient qualitative and efficiency results associated with the ever-increasing municipal companies' budget deficits: the

latter, which in 1960 were just over 3.5 billion £, reached the value of 800 billion in 1975 and 1800 billion in 1980. Moreover, the general financial situation of local authorities showed huge increases in deficits and indebtedness, exceeding any surveillance limit and requiring drastic mitigation measures. Due to their close link with local authorities and in consideration of the high level of their financial trouble (particularly in the transport sector), municipal companies were also subjected to this rigidly restrictive discipline, which even resulted in the ban to set up new companies. The fact that the same companies were once again united with the local authorities and subjected to drastic and undifferentiated economic-financial constraints, often even counterproductive to the conduct of business management (e.g. budget constraints, limits on costs growth, blocking of staff recruitment, ban on corporate union bargaining), was still another anomaly resulting from the persistence of an organic situation between authorities and companies. By the way, both the latter were for sure in an indispensable need for a process of efficiency.

With the overcoming of the financial accounting (typical of public bodies) and the adoption of the economic one (more in line with entrepreneurial subjects), the emancipation process of the local public company officially began. The latter was intended to show increasing margins of independence and responsibility, giving to the company a shape more like the form of enterprise. This innovation started in the most advanced local realities and was translated into the regulatory framework by introducing the "Budget Type" that took place under the Ministerial Decree of 4 February 1980; subsequently, with the Ministerial Decree 26/4/95, this scheme was adapted to the IV EEC Directive (already transposed into the Italian Civil Code). These measures made it possible to carry out two types of operations that were impracticable until then: on one hand the measurement of the industrial cost of the service, while on the other hand the comparison between the budgets and general accountings of the municipal companies with those of other operators, public and private. This stage marked an important step in the direction of an efficiency-oriented decision-making and regulation system.

With the Decree of the President of the Republic no. 902 of 4 October 1986, approving the new regulation of utilities companies which were dependent on local authorities, the changes adopted in previous years found an organic and consistent incorporation.

But, however, the relationships between local authorities and municipal companies were not yet sufficiently evolved to overcome the linkage of organicity that, as seen, characterised them. The companies, devoid of legal personality, did not have the property of their own assets and therefore could not exercise an autonomous financial policy, aside from being subordinated to a system of bureaucratic administrative controls (prior approval of business declarations) incompatible with the nature of the enterprise. In short, they were still too conditioned by a relationship of dependence with the local body.

Lastly, a further aspect is to be emphasized. From the late Seventies, municipal companies were sometimes transformed into power centres of the political parties among which they had been partitioned. In some cases, the same companies became bribery centres aimed at the occult funding of political currents as the judicial chronicles then highlighted.

There is no doubt that the institution of municipalisation, although it had not a few merits in promoting the social development (and, in some cases, even of the economic one) of the country, by that time it was operating in an economic reality where most of the conditions that had stimulated initially its birth and then its growth resulted completely transformed.

2.1.5 The progressive emancipation of the local utilities companies. The liberalization process of electricity and natural gas markets in Italy.

On horseback of the Eighties, the public finance crisis in Italy (added to other political and economic factors) caused an unsustainable debt stock of about 120% of GDP. Public enterprises were in turn indebted to unacceptable levels for any private investor operating under market conditions. On the other hand, the European Union had imposed a reduction in state debt, as well as rules on the prohibition of state aid and rules for liberalizing the markets in which the state used the original reserve to award economic activities to public economic entities. A privatization path of that markets, as well as the liberalization of the markets subject to state monopoly, more than an

internal political choice was therefore an obligation deriving from the European Union.

By the way, local utilities companies were more and more "slaved" to the limits of their setting. Among these, the most considerable seem to have been the tendency to undergo the severe influence of the political system and, nevertheless, the lack of incentives for efficient administration. Generally speaking, however, the almost total absence of stimuli for innovation and technological updating appeared to be the ultimate consequence of the fact that the State "had reserved" to itself the power to exercise monopoly (through public economic entities) in many activities that appeared difficult to justify in the face of the market failure's requirement (a circumstance in which, as well known, the government authority's intervention is required). In respect of those activities, in fact, it would have been possible to assess the eventuality of carrying them out in a competitive system. This was the crucial node that, together with the series of practical reasons described above (excessive public deficit, public companies' large indebtedness, new legal rules deriving from the EU), gave rise to the liberalization and privatization processes in Italy.

It is important to premise that the public utilities' liberalization processes have followed, for the particular drive of the European Union and the Italian Competition and Market Authority, some general criteria essentially based on the *unbundling*² rule:

Since many of the public utilities can be defined as "network" services (i.e. characterized by the existence of a network infrastructure), the first principle involves separating the network from the service: the monopoly can therefore remain on the network, but it is subject to the legal obligation for the monopolist to grant the access to the network itself to third parties (in return of the payment of a fee) in competition with each other (principle of TPA, *Third Party Access*)³.

 $^{^2}$ The term *unbundling*, with regard to the electricity and natural gas sectors, refers to the obligations of company separation (*ownership unbundling*), formal separation (*accounting unbundling*) and substantial separation (*functional unbundling*). At the regulatory level, the implementation of the *unbundling* discipline was initiated with the Resolution no. 61 of 11 May 1999 for the sole operators of the electricity sector, followed by the Resolutions no. 310 and no. 311 of 2001, respectively for the electricity and natural gas sectors' operators.

³ The *Third Party Access* principle is to allow non-discriminatory third party access to both *essential facilities* (non-duplicable infrastructures) and *bottleneck facilities*, i.e. duplicable infrastructures. The TPA, imposed precisely to companies that manage network and interconnection infrastructures, in line with the

- 2) The second criterion is the separation of the various value-chain subgroups that form the entire production cycle. The intention is to separate the activities that are still natural monopolies from those that indeed can be managed in a competitive dynamic.
- 3) The third general criterion is the rigorous separation, from an organizational and accounting point of view, between legal monopoly activities and competitive activities carried out by individual companies.
- 4) The fourth and last criterion is based on the principle that in the delivery of a utility service there may also be diseconomic activities that the private subject may have no interest in providing.

The modern history of Italian local public services begins with Law 8 June 1990, no. 142 on the local municipalisms, which was subsequently absorbed (together with the other legislative amendments that have been followed over the years) by Legislative Decree no. 267 of 10 August 2000. The Law no. 142/1990, in the framework of a powerful boost to the strengthening of local municipalisms' system (in particular, Communes and Provinces' statutory power was recognized), had provided that: *«Communes and Provinces, within the scope of their respective competencies, provide for the management of those public utilities linked to the production of goods and activities aimed at achieving social purposes and promoting the economic and civil development of local communities».*

It should be reminded that Law no. 142/1990, however, in introducing a series of new perspectives in the local public services' sector, has not removed the possibility of using previous management methods (which, as seen, were often unfavorable to operational efficiency) and, above all, it has not been able to foresee credible sanctions for those who would not have adequately reformed the current management modalities. The Law in question also introduced a model of joint stock company with a prevalent public capital precisely in the years when a growing push towards warm privatizations was taking place. This constraint, however, had a short life: Law 23 December 1992, no. 498 intervened precisely to abolish the clause of the local public

European legislation imposes rules that favor the access of all users to existing infrastructures. Moreover, the fee prices payed by third parties have to be objective, non-discriminatory and fixed on the basis of contractual terms, or established by the regulator.

capital's majority ownership in the (former) municipal companies, thus also allowing the constitution of joint stock companies with a minority participation of local bodies. Thanks to the Law no. 95 of 29 March 1995, the relationship between local utilities companies and local public authorities began to evolve towards a more homogeneous model based on negotiation logic and focused on the new *Service Agreement* tool, with a relevant change from the previous hierarchical relationship between "controlled and controller".

In short, there was an increasing tendency to favor the role of guarantor and market regulator for the local government (as for the public hand in general) by limiting its interference both in the management and in the property of the (now former) municipal companies. From this point of view, the "formal privatization" phenomenon (which was taking place in those years) was certainly favored by the measures that facilitated and streamlined the process of transformation of "special companies" (the most widespread between the municipal companies' administration models provided by Law no. 142/1990) into joint stock companies: in particular, this path has been possible thanks to the Law no. 127 of 15 May 1997 which at the same time established that, within two years from the date of the corporate transformation, the same local government should divest all or part of its municipal company's share, thereby enabling the entry of private subjects in the equity of the companies.

Some numbers will be helpful to understand how the regulatory innovation process just described has led to the modification of the management structures of the joint stock companies present in the local public utilities sector: the latter in 1995 were still 22, in 1997 they became 56 and then reached the number of over 450 at the beginning of 2002. By the way, the latter figure is also a result of the regulatory measures taken to regulate the electricity and natural gas markets between 1999 and 2000.

In the implementation of Directive 96/92/EC (laying down common rules for the European electricity market), the Legislative Decree n. 79 of 16 March 1999 has been issued. This Decree played an important role in introducing a competitive system in the electricity sector which, since its nationalization (happened in 1962), had seen ENEL as the only vertical monopolist that had control over all the phases of the value chain, from generation to final sale. The Decree 79/1999 (also called "Bersani Decree"), therefore, marked the beginning of the path that has led to the

transformation of the electricity industry from vertically integrated into multibusiness. Another time, the ultimate goal – apart from lowering the tariffs due to the introduction of the competitive dynamic – was to ensure the entry of private capital into the industry.

Known as "Letta Decree", the Legislative Decree no. 164 of 23 May 2000 has indeed transposed the Directive no. 98/30/EC of 28 June 1998, carrying common rules for the European natural gas market. This Decree has established that *«the activities of importing, exporting, transporting and dispatching, distribution and sale of natural gas in whatever form and use are free»*⁴, hence promoting the market opening.

2.1.6 Art. 35 of the Law 28 December 2001, no. 448 (2002 Financial Law) and the following legislative innovations. The transposition of further European directives on liberalization.

After more than a decade since the first 1990 regulations, and as a result of the pressure exerted by the Italian Antitrust Authority, the legislator succeeded in approving a comprehensive reform of local public utilities by art. 35 of Law no. 448/2001, better known as 2002 Financial Law. The latter has profoundly altered the original apparatus of Law no. 142/1990 in the part concerning the discipline of the local public utilities' management patterns. In particular, it provided:

- 1) the distinction between those who owns industrial services' networks and facilities, who exercises the management and who is the service manager;
- the obligation to outsource the services management of industrial relevance and "residuality" of management *in economics* for the others;
- the assertion of the concept of "competition for the market" through the use of the tender mechanism.

However, art. 14 of Decree Law no. 269 of September 2003 – converted into law on 24 November 2003 – amended both art. 113 and 113-bis of the Legislative Decree no. 267/2000, as well as art. 35 of Law no. 448/2001: it introduced some important changes to the ownership of the networks, their management and the provision of the

⁴ Art. 1, par. 1 Legislative Decree 23 May 2000, no. 164

service. In particular, the reform in question has had a significant impact on the structure of the networks' holder companies. In fact, paragraph 13 of art. 113, as amended, states that: *«local governments, even in an associate form, in the cases where it is not prohibited by sectoral regulations, may confer the ownership of networks, plant and other capital assets to publicly-owned companies»*. Further modifications were also made in relation to the rules on network and plant management, on one hand confirming the possibility to locate the network operator by tender and, on the other hand, keeping the *in house* commitment as the only direct typology.

Refocusing the attention on the liberalization processes of the energy sectors, four further directives at Community level were issued during the first decade of 2000: two for the regulation of the electricity sector and two for the natural gas sector. Regarding the latter, through the transposition of the so-called "Second Gas Directive" (2003/55/EC), the Italian legislator provided the adoption of a governance model aimed at regulating the relations between parent companies and subsidiaries: this process clearly had the aim of making the essential infrastructures' management as neutral as possible. Turning to the electricity sector, the transposition of the Directive 2003/54/EC implied for the Italian system the strengthening of the rules regarding competition between operators, with the ultimate goal of creating the single European electricity market. Finally, in the implementation of Directives 2009/72/EC (Third Package), the Legislative Decree 01/06/2011 no. 93 introduced important measures to ensure a more competitive setting for electricity markets, as well as the obligation to separate ownership and management between the various businesses in vertically integrated companies.

2.1.7 Market reactions and trends following the liberalization process

Regulatory developments and technological innovation, which have characterized the local public utilities since the early 1990s, have altered the industry's characteristics and the evolutionary pathways of the companies operating in. The analyzed liberalization process of public enterprises on one hand undoubtedly rationalized the

direct intervention of the Public Administration in the services production, but on the other hand it triggered local reactions that were completely different. In general, however, it has been possible to perceive an increasing use of the joint stock company form, which actually has not always been accompanied by an equally massive involvement of private capital. It is significant to note that, as early as the early 2000s – with the liberalization process still in progress –, the evolution of management patterns tended in large extent to private law institutes. This trend is confirmed by data collected in the following years that point out the unquestioned prevalence of capital companies, which have come to represent more than 58% of the total number of former municipal companies. Of the latter figure, however, it is of the utmost interest to note that only 16% shows a mixed capital, while in the remaining 42% the only shareholders of the companies are still the local governments.

The motivations of this change can be sought in the greater slender nature of the private institute; by the way, only few companies are interested in acquiring distinctive competencies and financing capacity from the private sector's entry into their social capital, despite those (47%) who find the reason for transforming in the mere adaptation of the legal form to sectoral standards.

On a sample of 104 companies, it was observed that the exact half of the interviewed from 1990 onwards have deployed diversification processes: between these, 36% went to *multi-utility* solutions, 31% to *multi-service* solutions, while the remaining 33% pursued both ways.

2.2 Current set-up of the Italian multi-utility industry

Following the deregulation processes' progress, which, as seen, have taken hold in Italy since the 1990s, there has been a tendency by many local public operators to converge towards the *multi-utility* business model.⁵ This process has been also a direct consequence to the operators' need to defend their market shares in response to increased competition and, consequently, to limit the fall in profit margins previously realized under monopoly conditions: hence, they have put in place a (at times rather complex) aggregation and growth path that involved, in several cases, the expansion into other businesses beyond the core one. The use of the multi-utility model has therefore been (at least initially) a defensive strategy for maintaining a presence in the past guaranteed by monopolistic retirement positions, rather than an aggressive tool for expansion into new markets.

The main multi-utility players can be considered the most considerable result of the municipal incumbents' concentration process. The rise of this business model in the utilities industry has overcome the aforementioned mono-business configuration, as well as the municipal and local geographic boundaries that had always characterized the municipal realities. Companies, presenting themselves to the market in their new set-ups, have in some cases pushed themselves to being listed in the stock market, aggregating private investors and gathering support from the markets themselves.

However, it is necessary to make a distinction in the Italian market between large national operators such as Eni, Enel and Edison – which have long been pointing to international markets by setting up a multi-business strategy – and the most properly defined *local* multi-utilities. Among the latter, in the multitude of municipal or local industrial poles, four companies emerge, namely A2A, Hera, Acea and Iren:⁶ they are

⁵ The *multi-utility* term generally refers to operating companies that can offer (basically to the same customer base) a multiplicity of services, and therefore which are simultaneously present in the various businesses of electricity, natural gas, water cycle, waste cycle, local public transport or other.

⁶ It is worth noting, however, that in the current set-up of the Italian multi-utility industry a fifth reality is establishing, namely Estra Group. The latter originates from the merger of some former municipal companies headed by 97 Communes of the provinces of Arezzo, Florence, Grosseto, Pistoia, Prato and Siena. In particular, Estra is a multi-utility among the top ten in Italy in the energy sector and, through its companies, supplies services ranging from the sale of natural gas, LPG and electricity to energy services and natural gas distribution, as well as telecommunications. Estra Group closed the 2016 financial year with total revenues of 1,044.4 million, up 13.3% compared to 2015. However, for turnover and size, it is

leaders for turnover and company size, and they arise from a development process of the former municipal companies operating in the vast metropolitan areas of Milan/Brescia, Bologna, Rome and Turin/Genoa.

2.1.1 A2A S.p.A.

The most interesting cases of multi-utilities' development have therefore taken place in Central-Northern Italy; in these territories, in fact, an economic-industrial segmentation for regional macro-areas has been consolidating.

The A2A Group has become a reference entity for the central area of the North. Originally born from the merger between the former municipal companies of Milan (AEM and AMSA) and Brescia (ASM), it formally started its activities on 1 January 2008. It has been subsequently enlarged mainly through the acquisition of ASPEM (Varese) and significant investments in the equities of the listed group ACSM-AGAM (Como and Monza) and of the Valtellinese Energy Company. Thanks to the subsequent extension also in some territories of Piedmont, Veneto and Trentino Alto Adige, A2A qualifies as a group with a distinctly multi-territorial character. At the same time, unlike the other multi-utility leaders in the Italian market, A2A has always shown a strong focus on international dynamics over the years, as evidenced by the acquisition of 43.7% of EPCG (a company operating in the production and distribution of electricity in Montenegro) in September 2009 and full control of the French company Coriance (then sold in 2012). Nevertheless, it is worth saying that the "municipal" connotation of the group's equity remains: in fact, the majority shareholders are still the Municipalities of Milan and Brescia, holders of 50% of the shares (25% each).

With \in 1.2 billion EBITDA, A2A is the largest company among the multi-utilities. It is the second most important power generator in Italy with an installed capacity of 9.200 MW (of which 2 GW hydroelectric) and plants in 9 Italian regions (Lombardy, Calabria, Abruzzo, Friuli, Piedmont, Sicily, Emilia, Campania and Apulia). Power

still far from the big four in the industry despite its management is already assessing the upcoming stock market listing in order to get the resources needed to accelerate the company's growth process.

generation and energy sale units account for more than 40% of the group's EBITDA, the networks and district heating for 31% and the waste business (the company has facilities in Lombardy, Piedmont and Campania) for around 20%. Regarding the latter business, with 2.5 million tons treated, A2A ranks second after Hera and it has stated its intention to grow through acquisitions. Finally, the cited stake of around 44% in EPCG (the Montenegro incumbent) is worth 6% of the group's EBITDA.

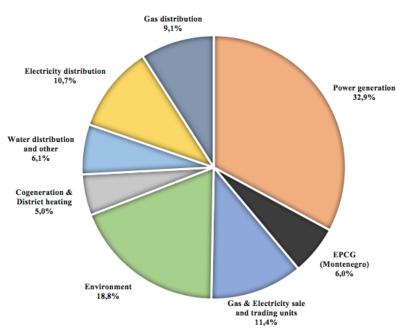


Figure 2.1: A2A's 2016 EBITDA breakdown

Source: personal estimates on company data

Following the path started in 2015, A2A's Board of Directors approved in April 2017 the Strategic Plan 2017-2021, confirming or improving all the industrial objectives already defined. In particular, the new strategic priority consists in the "relaunch" of the sectors regarding environment as well as networks and energy services,⁷ through a further acceleration of investments.

The implementation of the new Plan will help to significantly redefine the industrial assets portfolio, enabling A2A to better grasp the growing opportunities of the market and to propose on an industrial scale some of the projects that have already begun at an experimental stage in the fields of innovation, digitalization and energy efficiency.

⁷ A2A S.p.A.'s 2017-2021 Industrial Plan report

In the 2017-2021 period, a total investment of about \notin 2.75 billion is expected, an increase of \notin 500 million over the previous five-year Plan. Nearly 80% of the investments will concern networks and environment sectors. In 2021, A2A aims to reach an EBITDA of 1.38 billion euros and a net profit of 0.47 billion euros, reducing the net financial position by 0.6 billion euros.⁸

MAIN FIGURES € mn	2014	2015	2016	2017E	2018E	2019E
Revenues	4,984	4,921	4,886	5,523	5,394	5,624
Growth	-11%	-1%	-1%	13%	-2%	4%
EBITDA	1,024	1,048	1,231	1,179	1,180	1,217
Growth	-10%	2%	17%	-4%	0%	3%
Adjusted EBITDA	1,024	1,048	1,103	1,145	1,180	1,217
Growth	-10%	2%	5%	4%	3%	3%
EBIT	362	215	456	664	644	659
Growth	41%	-41%	112%	46%	-3%	2%
Profit before tax	161	76	356	550	536	559
Growth	28%	-53%	368%	55%	-3%	4%
Net income	-37	73	224	358	341	347
Growth	-160%	-297%	207%	60%	-5%	2%
Adj. net income	157	259	270	297	342	347
Growth	-4%	65%	4%	10%	15%	1%

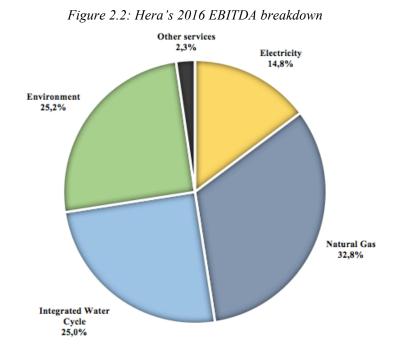
Table 2.1: A2A's main figures for the period 2014-2019

Source: Company data and Equita SIM estimates

2.2.2 Hera S.p.A.

Hera is a multi-utility company controlled by more than 100 Municipalities of Emilia-Romagna region, as well as by Padua and Trieste Municipalities. Born in 2002 by the merger of 11 urban and provincial utility companies operating in Emilia-Romagna, the group, through regional consolidation, has managed to impose itself in about 70% of the territory. Nowadays Hera has a customer base of about 4.4 million, confirming itself as a national leader in waste treatment, second Italian operator in the integrated water cycle and third Italian gas distributor. Although in recent years it has expanded its influence in the regions of Marche, Veneto, Friuli Venezia Giulia and Abruzzo, Hera represents the Italian multi-utility that has been able to grow, building also scale and range economies, while remaining strongly tied to its territory of origin.

Waste management accounts for around 26% of the group's EBITDA, while the networks (water cycle management, gas and electricity distribution) for 47%. The last main business is the energy sale (24%). The 2017-2020 Business Plan foresees a CAGR of EBITDA at 4% including \in 106 million from aggregations. The 70% of capex are focused in networks, with the target to reach 55% of EBITDA in regulated businesses at the end of the period.



Source: personal estimates on company data

The Industrial Plan to 2020 – presented at the beginning of January 2017 – declines the current strategic framework and seeks to sustainably continue the EBITDA growth, exceeding one billion euros at the end of the period, with a target of around 200 million euros' growth over the five years. The expected growth is supported by the standard development model, based on the driving force of the two historic engines: organic growth and external growth. The investment plan, worth about 2.5 billion euros, will be fully funded by cash generation; the latter will lead to a further improvement in financial soundness, despite an 11% increase of the dividend per

share, to be progressively achieved until 2020.⁹ Moreover, the plan foresees to aim the 70% of capex and financial investments in networks (including \in 350 million for natural gas distribution's tenders). Excluding the aggregation deals with multi-utility businesses, the capex plan amounts to \in 2.3 billion in the Industrial Plan's time horizon.¹⁰

MAIN FIGURES € mn	2013	2014	2015	2016	2017E	2018E
Revenues	4,851	4,513	4,818	4,705	4,786	4,805
Growth	6%	-7%	7%	-2%	2%	0%
EBITDA	831	868	884	905	948	960
Growth	25%	4%	2%	2%	5%	1%
Adjusted EBITDA	831	868	884	905	948	960
Growth	25%	4%	2%	2%	5%	1%
EBIT	416	441	442	452	452	449
Growth	24%	6%	0%	2%	0%	-1%
Profit before tax	306	295	308	330	337	336
Growth	43%	-4%	4%	7%	2%	0%
Net income	165	165	180	199	215	215
Growth	39%	0%	10%	10%	8%	0%
Adj. net income	159	168	185	190	215	215
Growth	58%	6%	10%	3%	13%	0%

Table 2.2: Hera's main figures for the period 2013-2018

Source: Company data and Equita SIM estimates

2.2.3 Acea S.p.A.

The only reality that stands out outside the northern territory is the Roman multiutility Acea. The latter is the most dated of the multi-services companies analyzed, and in fact it derives directly from the AEM (Municipal Electric Company) of the Rome Municipality, constituted in 1909, then converted to Agea and finally in 1945 in Acea. In 1992 it was transformed from a Municipal Company to a Special Company, and since 1 January 1998 it has become a joint stock company. During the subsequent listing on the stock market, the company placed on the market an equity share of 49%; the remaining 51% is still owned by the Municipality of Rome Capital.

⁹ Hera S.p.A.'s 2017-2020 Industrial Plan report

¹⁰ Equita SIM report on Hera S.p.A.'s 2017-2020 Industrial Plan (January, 2017)

Currently the other main shareholders are Suez (23.3%) and Caltagirone Group (5%).¹¹ Acea is active in the water and electricity distribution in Rome, in the waste treatment and electricity sale. It is ranked as the first national operator in the water sector and among the main players in the electricity chain (historical core business of the group) and in the environmental sector. Moreover, it holds significant shareholdings in companies (in the water sector in particular) located in both Tuscany and Umbria at national level and in South America at international level. By the way, the business is mainly regulated in excess of 70%.

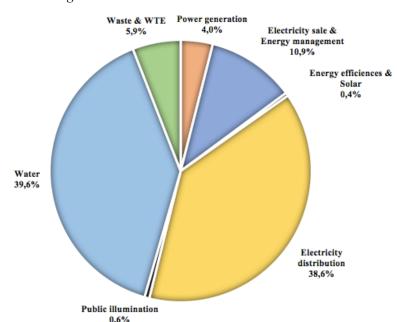


Figure 2.3: Acea's 2016 EBITDA breakdown

Source: personal estimates on company data

Although Acea is the multi-utility that has a lower turnover (2016) compared to its top three competitors, at the same time it shows to be the most virtuous in cost as well as amortization/depreciation management, coming to present the best industry's outcomes regarding the EBIT (2016) and the pre/post-minorities profit (2016). On 11 March 2016, the Acea Board of Directors approved the Group's Industrial Plan for the period 2016-2020. This Plan confirms the focus of the company's strategy on

¹¹ This corporate structure is the result of the transaction that took place in spring 2017, which saw the French group Suez rising from 12.5% to 23.3% in Acea's shareholding thanks to the purchase of shares previously held by Caltagirone Group.

regulated activities, innovation and rationalization of internal processes as well as quality of the service. Moreover, the targets set in the Plan envisage strong growth with EBITDA CAGR of 4% to \in 890 million and pre-minorities profit rising by 7% on average. The forecasts take into account the new regulatory framework for electricity and water distribution, resulting in optimization of resource allocation in the most profitable business areas.¹² An acceleration and increase in efficiency targets are also hypothesized.

The Acea Group is continuing its rationalization and efficiency action in the operational processes of all business and corporate areas. These goals are pursued also through an important development of corporate information systems that has enabled to innovatively manage the networks and deliver the services. Technological development and changing customer habits and expectations have put the Acea Group in the face of the need for a profound change that is not only technological but also organizational and cultural, and has taken the name of Acea2.0. The program realizes the company's will to make important investments that, without affecting the soundness of the Group's financial structure, have an immediate positive impact on performance, EBITDA as well as billing and collection processes.¹³

MAIN FIGURES € mn	2014	2015	2016	2017E	2018E	2019E
Revenues	3,038	2,917	2,832	2,747	2,679	2,625
Growth	-8%	-4%	-3%	-3%	-2%	-2%
EBITDA	718	732	897	833	840	862
Growth	6%	2%	23%	-7%	1%	3%
Adjusted EBITDA	718	732	897	833	840	862
Growth	6%	2%	23%	-7%	1%	3%
EBIT	390	386	526	450	445	450
Growth	8%	-1%	36%	-14%	-1%	1%
Profit before tax	290	296	414	369	363	366
Growth	12%	2%	40%	-11%	-2%	1%
Net income	162	175	261	242	236	239
Growth	15%	8%	49%	-7%	-2%	1%
Adj. net income	158	189	193	221	220	232
Growth	30%	19%	2%	15%	0%	5%

Table 2.3: Acea's main figures for the period 2014-2019

Source: Company data and Equita SIM estimates

¹² Acea S.p.A.'s 2016-2020 Industrial Plan report

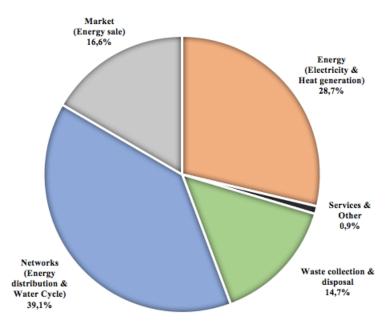
¹³ Acea S.p.A.'s 2016 Management Report

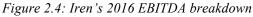
2.2.4 Iren S.p.A.

The Iren Group was born in 2010 following the merger between Iride (holding comprising the former municipal companies of Turin and Genoa) and Enia (a company formed in 2005 by Agac, Amps and Tesa, former municipal companies of – respectively – the cities of Reggio Emilia, Parma and Piacenza), and it represents the main interregional player in the North-West.

Iren operates in the sectors of electricity (production, distribution and sale), thermal energy for district heating (production and sale), natural gas (distribution and sale), integrated waters services, environmental services (collection and disposal of waste) and services for the local authorities. The Group's activities are a balanced mix between "regulated" (distribution activities recognized with an allowed return at national level) and "unregulated" (generation and sale) assets, with revenues mainly coming from the energy sales and the distribution activities.

It is the fourth biggest player in the segment in terms of market capitalization, and one of the most important in terms of power generation and distribution/sale activities. Moreover, Iren is the number one player in the country for the district heating activities.





Source: personal estimates on company data

Iren is going on with its growth process while maintaining a strong focus on its reference territories. On 18 October 2016, the Board of Directors approved the Industrial Plan to 2021, which focuses on low environmental impact activities such as district heating networks, plant-based consolidation related to the concept of *Waste to* material as well as the implementation of systems that allow tele-reading and telemanagement of electricity, natural gas and water meters. The further development of smart grids (the intelligent networks) represents another of the Group's goals.

Moreover, the Plan reconfirmed the strategic guidelines based on efficiency, territorial consolidation within its areas of reference, customer focus and sustainability. Based on these strategic lines, the Iren Group targets a growth of EBITDA and a steadily increasing of Group's profit that allows a growth in dividend per share.¹⁴ The operational targets outlined in the Industrial Plan to 2021 will allow a robust cash generation to easily cover the challenging investment plan of more than 2.2 billion euros as well as a balance between net debt and EBITDA.¹⁵ This will ensure for the following years a considerable financial flexibility that can be used to capture attractive investment opportunities and M&A, enabling the Group to grow as an aggregator pole within the reference territories.

MAIN FIGURES € mn	2014	2015	2016	2017E	2018E	2019E
REVENUES	2,902	3,094	3,283	3,221	3,014	3,130
Growth	-16%	7%	6%	-2%	-6%	4%
EBITDA	623	678	814	808	812	845
Growth	-4%	9%	20%	-1%	1%	4%
Adjusted EBITDA	630	678	814	808	812	845
Growth	-3%	8%	20%	-1%	1%	4%
EBIT	325	347	427	431	420	437
Growth	4%	7%	23%	1%	-3%	4%
PBT	214	246	303	334	327	343
Growth	0%	15%	23%	10%	-2%	5%
NET INCOME	69	118	174	206	203	208
Growth	-14%	71%	47%	19%	-2%	2%
Adj. NET INCOME	57	118	174	206	203	208
Growth	-43%	108%	47%	19%	-2%	2%

Table 2.4: Iren's main figures for the period 2014-2019

Source: Company data and Equita SIM estimates

 ¹⁴ Iren S.p.A.'s 2017-2021 Industrial Plan report
 ¹⁵ *Ibidem*

2.3 M&A: a tool for altering market structures

M&A operations – defined as *extraordinary finance* operations – must be contextualized within the strategic choices that each company makes to pursue the finalities that underlie its activities and which inspire its actions. Value creation and growth are – by definition – the foundation of the *modus operandi* of every profitmaking corporation.

Given the fact that the company in the long run leans to consolidate a position of sustainable competitive advantage in its business sector(s) and therefore to maximize the value created for the end-user of its products/services, it uses extraordinary transactions as they are functional to the implementation of the company's strategic lines:¹⁶ therefore, these operations represent one of the tools to create value.

On the other hand, growth is an important and natural transition in the DNA of both business and management. Often, the growth engine is accelerated by the reference economic scenario, which serves as a tool for revising strategic models, so that companies are forced to become accessory of a difficult and (sometimes) sudden change. However, businesses are not constantly subject to growth forces or stimuli, but tend to undertake this path if there are favorable and appropriate conditions for starting it.

Corporations can undertake different growth paths in order to create greater value. By the way, the strategies that companies can go through are characterized by a dual orientation: either internally or externally. In the first case, the management will focus on developing new products/SBUs, as well as strengthening the organizational structure and quality systems; in the second case, indeed, the company will opt for quantitative development through acquisitions, mergers, joint ventures, alliances and cartels. In particular, when referring to external growth in a strict sense, we refer to all transactions of extraordinary nature like the acquisition of other businesses' shareholdings or assets, with the consequent transfer of ownership, decision and control rights to a new economic entity, which is commonly represented by the buyer. The latter, in undertaking an M&A operation, may pursue one or more strategic

¹⁶ Bower, J.L., Not All M&As Are Alike - and That Matters, Harvard Business Review, 2001

objectives, such as: achieving economies of scale (thus lowering average manufacturing costs or eliminating redundancies in the organization), diversifying the product/service line (thus changing its risk profile), carrying out a defensive acquisition (which e.g. will alleviate the cause of the acquirer's severe downturn), eliminating a supplier/customer/competitor (in order to, respectively, reduce the risk of dependence on an outside supplier, eliminate the risk of price gouging, achieving more market share), acquiring a specific know-how, reducing the time-to-market for a specific product/service, etc.

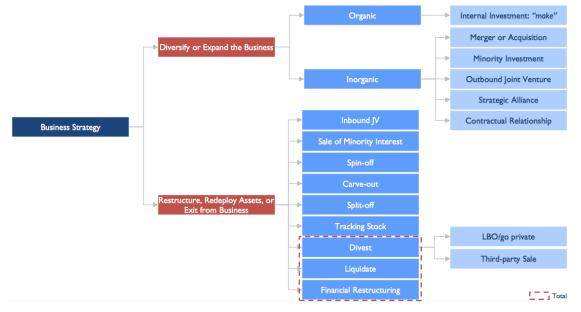


Figure 2.5: Firm Growth & Range of Transactions

Source: Bruner, R.F., Applied Mergers and Acquisitions, Wiley Finance, 2004, Ch. 6

By the way, mergers and acquisitions have been widely spread also due to the speed with which they allow acquirer companies to achieve competitive advantages given by more market shares and additional specific know-how. However, exactly due to their growing diffusion, these operations have had a major role in the economic debate on the optimal size of an enterprise.¹⁷ Given the complexity of the factors involved in these operations, there have been not always concordant analysis on the effects they have on multiple business actors.

¹⁷ Kumar, N., How Emerging Giants Are Rewriting the Rules of M&A, Harvard Business Review, 2009

In the field of the Schools of Thought, it is possible to distinguish studies with an *economic approach* from studies with a *business approach*. Regarding the economic studies, we can moreover distinguish *Industrial Organization* and *Financial Economics*: while the first one investigates the consequences of M&A operations on the economic system, the latter indeed focuses on shareholders. However, as regards the analysis that is being carried out in this work, the field of interest is precisely the one of Industrial Organization, which is based on the archetypal Structure-Conduct-Performance: the latter foresees that the structure of the enterprise influences its behavior and therefore its performance. Mergers and acquisitions thus become a means for influencing market structures. These results refer to the studies developed by F.M. Sherer (1970),¹⁸ which show how M&A transactions favor market concentrations. By the way, there are many goals that are pursued through them, although, from an empirical point of view, their actual influence on performance and the consequences for the economy cannot be demonstrated.

In pursuing the purposes of the present work, it is crucial to point out that M&A operations have often led to substantial changes in the Italian industrial system, pointing to the direction of certain strategic guidelines within companies in the Country system and involving a variety of interests and individualities. That is exactly the case of the multi-utility industry.

¹⁸ Scherer, F.M., Industrial Market Structure and Economic Performance, Rand McNally & Co., Chicago, 1970

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3. Research Methodology

The purpose of this chapter is to provide an understanding of how the research has been conducted from a methodological point of view. As a matter of fact, Collis and Hussey¹⁹ define the research methodology as the "overall approach to the entire process of the research study". The first part of this section presents the chosen research strategy. The second describes how the literature review has been carried out in order to collect key theoretical foundations for the study. Subsequently, the third part provides explanations regarding the research design chosen, as well as the reasons behind the choice. Lastly, the chapter ends with a discussion on the research methods employed to gather and analyse data, with a focus on external validity and reliability issues.

3.1 Research strategy

Bryman and Bell^{20} provide the easiest definition of research strategy, namely "*a* general orientation to the conduct of a business research". It is worth saying, however, that a unique and correct definition is not easy to formulate, but, generally speaking, the research strategy constitutes the basis of a research methodology.

At the same time, Bryman and $Bell^{21}$ define the possibility of choosing between three different research strategies, namely the quantitative, the qualitative and the mixed research. The first one stresses the quantification primarily in the collection and then in the analysis of data. The second one is more focused on words rather than numbers. The mixed method, finally, foresees the combination of the other two just cited. There are some implications related to the choice of one particular research strategy. For example, a deductive approach – aimed to test a developed hypothesis by using

¹⁹ Collis, J., Hussey, R., Business Research: A Practical Guide for Undergraduate and Postgraduate Students, Palgrave Macmillan, 2009

²⁰ Bryman, A., Bell, E., *Business Research Methods*, Oxford University Press, 2011: 26-27

²¹ Ibidem

empirical data – is more suitable to the quantitative strategy, while an inductive approach – which entails the generation of theory through the empirical analysis – better fits the qualitative strategy.

The present work predominately assumes the characteristics of a *qualitative study* in which, however, quantitative methods are often employed to collect and analyse relevant information (especially concerning corporate financial data). Since these two strategies can work together, the synergies created by their convergence bring positive effects to the validity of the overall research's outcomes. The features of the topic under analysis represent the main reason why the author decided to opt for a research strategy of (mainly) qualitative type and, therefore, an inductive approach.

3.2 Methodology applied to literature review

Literature review generally constitutes an elaboration of scientific contributions published by accredited authors on a given subject. The aim pursued with it is to provide first the researcher and then the reader what knowledge and ideas have been expressed on a given topic, as well as the authoritativeness and consents that have been consolidated around them. Its elaboration is a valuable pre-operation in the study of a research topic. Moreover, a literature review must be defined from a guiding concept, represented by the research question to which the work aims to answer. As a matter of fact, the more the research question is clear and defined, the easier it will be to prepare the literature review and to find the material on which it will be based. The literature review construction-phase is an analytical and critical operation that aims to build a reasoned bibliographic pathway, which includes the reading of individual texts and the analysis of their relevance with respect to the research theme considered. In order to perform the literature review for this Thesis, the author accomplished the following steps:

- definition of the subject of scientific investigation, making clear the context in which it is inserted;

- drafting of the reference parameters by which selecting the contributions, hence coming up with inclusion/exclusion criteria;
- keywords individuation, an operation that required the enucleation of synthetic terms (which cull the meaning of the research);
- test of the defined keywords in different databases;
- summing up the overall review and ending up with a research objective specifically redefined.

The literature review process has been also the tool through which the researcher could clarify that the peculiarities of the topics studied in the present work are not analysed in unity by any other paper so far, but at most in single different articles; this fact constitutes a gap to be filled in literature, and thus the purpose of this study is to do so.

After the identification of the research subject, as said keywords were first selected and then tested on various databases. These keywords included, among the others: *Regulated business, Regulated industry, Municipal companies, Liberalization process, Multi-utility industry, Italian multi-utilities, Business mix, Local utilities, Public utilities, M&A process, External growth, Value creation, M&A trends, Industrial policy, Political interference, Industrial organization, Market structure.*

The main sources of data employed have been the LUISS University's library and academic database, which allowed the researcher to collect information from scientific publications, academic volumes and papers. In addition, further sources of data have been articles (particularly from the Harvard Business Review), blogs and web pages. It is important to notice that, given the nature, the overall framework and the purpose of the present work, crucial sources of information (as already seen in chapter 2) have been the various Law texts which have affected the industry in question over time, as well as the companies' financial statements and *interim reports* on operations; in addition, some reports issued by the independent investment bank Equita SIM (based in Milan, Italy) regarding the examined companies and the overall industry have been employed. Nonetheless, as specified in the first footnote of the second chapter, the first section of the Theoretical Framework has been developed mostly on the basis of previous studies carried out by this paper's author regarding the history of the utilities industry in Italy.

As a rule, the sources of data have been prioritized according to the criteria of the relevance to the purpose of the study, as well as the reliability and importance of the particular source. Moreover, when deemed necessary, some statements, assertions and opinions have been compared and tested in order to reach a level of reliability as higher as possible.

3.3 Research design

According to Bryman and Bell,²² the research design generally provides "*a framework* for the collection and analysis of data". Regarding this Thesis, the author chose to structure the research as a *single case study* that allowed him to examine the Acea S.p.A. case with, at the same time, a parallel deep analysis of the other main players of the Italian multi-utility industry. The choice of not focusing completely on one company was due to the need of carrying out a wider industry analysis in order to ending up with a solution to the research question as effective and complete as possible. However, this process has not resulted in turning the present work's research design model into a different one (e.g. *multiple case study*), given the fact that the empirical comparison (i.e. the interviews) has been conducted with a focus on Acea S.p.A. At the same time, this research structure has permitted to overcome (at least partially) the limits generally identified in the single case study design. As a matter of fact, even if this model is frequently used to structure studies regarding business research (due to its solid degree in *particularization*, *internal validity* and *credibility*), it has several discussions running around its external validity (also labelled generalizability) and reliability concepts. Bryman and Bell²³ state that if, on one hand, the single case study offers the undeniable advantage to make the researcher able to elucidate the studied organization's peculiarities in-depth, on the other hand it cannot be representative to provide findings and generate reliable theories to be extended to wider areas or else applicable more generally to other cases.

²² *Ivi*: 40-41

²³ *Ivi*: 59-63

It is obvious that, nevertheless, the peculiar research structure applied to this study by the author will not invalidate the just explained weaknesses typical of the single case study design, which anyway remains the reference framework of the research conducted.

3.4 Methodology applied to data research

Following the definition given by Bryman and Bell in their work,²⁴ a research method is simply a "*technique for collecting data*". It can involve a specific instrument, such as a self-completion questionnaire or a structured interview schedule, or participant observation whereby the researcher listens to and watches others. The different types of research are deeply related to both the research strategy and design chosen to carry out the analysis. Bryman and Bell²⁵ underline also that quantitative researches generally employ structured interviews and self-completion questionnaire, while unstructured or semi-structured interviews and participant observations are the research methods most widely employed in qualitative studies, partly due to their flexibility. With regard to this work, this flexibility feature was required as necessary in order to obtain from the conducted interviews a response that would comprehensively cover the research field examined: for this reason, a semi-structured method of interview was selected by the researcher.

As previously explained in paragraph 3.1 of this chapter, even if this work sees the predominance of the qualitative strategy over the quantitative one, some quantitative tools have been used to better perform certain sections of the research. This approach reflects the idea of *triangulation* expressed by Bryman and Bell,²⁶ which implies that "*the results of an investigation employing a method associated with one research strategy are cross-checked against the results of using a method associated with the other research strategy*". The research was carried out in line with this concept.

²⁴ *Ivi*: 41

²⁵ *Ivi*: various chapters

²⁶ *Ivi*: 631-632

Furthermore, two sources of data have been employed in the development of the empirical analysis, namely:

- Internal sources, which are strictly related to Acea S.p.A. information. There
 have been some different ways through which the researcher has gathered (or,
 in some cases, tried to gather but without success) data regarding the "target"
 company. In particular, these are:
 - the Acea-focused part of the interviews conducted with a prominent executive in the utility industry (already CEO of Acea S.p.A. in the past), which, for the position he currently holds, has requested – as already explained in the first chapter – not to be mentioned directly;
 - the contacts undertaken with the current Acea S.p.A.'s management (in particular with the secretarial office of Mr. Stefano Donnarumma CEO and directly with Mr. Massimiliano Paolucci External Relations Director –), which ended up with a refusal from the company in accepting any type of interview due to the facts that were taking place at that moment (Acea is a listed company, and in summer 2017 had to deal with a relevant problem in the water supply for the Municipality of Rome; moreover, the company was on hold to present the new Industrial Plan and therefore could not expose itself on many topics dealt by the present work);
 - the company's latest Industrial Plan, Financial Statement and *interim reports* on operations, together with some reports issued by Equita SIM on Acea.
- External sources, which are aimed at harvesting information regarding the overall Italian multi-utility industry, its current dynamics and trends, as well as specific data on Acea's main competitors. In this type of sources are included:
 - the industry-focused part of the interviews conducted (with the above cited manager);
 - some "Spending Review" documents on municipalities recently issued by the Italian Government;

- A2A, Hera and Iren latest Industrial Plan, Financial Statement and *interim reports* on operations, together with some reports issued by Equita SIM on these companies.

3.5 Methodology applied to data analysis

The analysis of gathered data represents a crucial task to perform in order to highlight important findings and be able to compare them against the theory, hence drawing conclusions. For the purpose of this research, a *grounded theory* approach to data analysis has been chosen. The main reason behind this choice is the exploratory nature of this work, whose aim is to generate theory out of a single case study.

In its most recent incarnation, grounded theory has been defined as "theory that was derived from data, systematically gathered and analysed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another".²⁷ Thus, two central features of grounded theory are that it is concerned with the development of theory out of data and the approach is iterative, or recursive, as it is sometimes called, meaning that data collection and analysis proceed in tandem, repeatedly referring back to each other.

In the present study, the author resorted to *constant comparison*, which refers to "*a process of maintaining a close connection between data and conceptualization*".²⁸ As a matter of fact, after the development of a conceptual framework based on the extensive literature review carried out, data from interviews and own study have been analysed always referring to the cited conceptual framework, distinguishing findings and allocating them to the different issues concerned. The following step focused the attention on the analysis of the Acea Group outlooks, based on both its internal resources/capabilities and the dynamics currently influencing its reference context. Afterwards, an assessment of the Italian market has been conducted considering the

²⁷ Strauss, A., Corbin, J.M., *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, SAGE Publications, 1998: 12

²⁸ Bryman, A., Bell, E., Business Research Methods: 577

Acea's competitors positioning as well as the overall industry's current trends. The relevant information collected thanks to the combination of these last two steps eventually permitted to provide final conclusions.

3.5.1 Research validity

Due to the research design selected – the single case study –, the present paper's external validity is inevitably affected when trying to generalize the obtained results. As a matter of fact, although many researchers emphasize that they are interested in the detail of a single case, they do sometimes claim a degree of theoretical generalizability on the basis of it.²⁹

The purpose of this Thesis is to provide a detailed and at the same time all-around assessment on the reasons, the dynamics and the consequences of the M&A processes in the Italian multi-utility industry. To this end, the author chose to carry on the Acea S.p.A. case and, in parallel, a deep analysis of the other main players as well as of the industry's main characterizing facts. In this way, the Acea case has been constantly part of a wider analysis, and the synergies created by this framework aimed to increase the validity of the research conclusions. It is worth noting, in fact, that the objective pursued through the analysis performed in this work is not the generalization to other cases (instance in which the single case study design was surely not applicable), but instead the peculiarity of the role played by extraordinary finance operations in a specific industry.

3.5.2 Research reliability

As stated by Bryman and Bell, "the consistency of every research study strictly depends on the reliability of the data collected in the research process".³⁰ Although this criterion is more at issue when dealing with a quantitative research, it still gains

²⁹ *Ivi*: 61-62 ³⁰ *Ivi*: 157-158

relevance in studies with a qualitative nature, especially for what concerns *replicability*.

With respect to this work, the actions undertaken in order to safeguard its reliability and replicability are the following:

- for the own analysis of both the Acea case and the overall Italian market, the author employed the most contemporary reports gathered from – as seen – the sources as notable as possible;
- the interviews guides have been drawn up and sent to all the potential interviewees well in advance, allowing them to give a reasoned response;
- the interviews have mostly had written feedbacks, avoiding in this way misinterpretation of answers by the researcher, as well as mistaken conclusions based on that evidence.

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4. Empirical Findings

This chapter regards findings from both the author's study of M&A operations in the Italian multi-utility industry and the interviews conducted. The underlying aim is to present an analysis of the Acea case put in the wider context of the industry current trends and dynamics.

4.1 M&A operations in the Italian multi-utility industry: a (politically) regulatory-influenced path

Taking a step back in time and refocusing for a while the attention on the context of local municipal companies, it has to be said that they have operated for almost a century without any reciprocal interaction, unless being under the same municipality or anyway belonging to the same local public group. It is interesting to observe that the trend of mergers, acquisitions and alliances in the utilities sector has fully reflected the evolution of regulations in the individual sectors (electricity, natural gas, water, waste, public transport). Looking at the growth process of multi-service operators in the Italian market, it is easy to notice that exactly since the late 1990s (full liberalization period, especially in the energy sectors with Bersani and Letta Decrees)³¹ the first alliances and M&A operations took place, which led to a substantial change in the boundaries of companies. The latter, in fact, began to grow and to establish new collaborative relationships in their environment. In particular, as early as 2001, on a sample of 104 companies operating in the local public services industry, 13% concludes acquisitions or mergers and 40% stipulates alliances.³² These operations, however, have increased by number as the liberalization process has

³¹ For a further insight on Decrees no. 79/1999 (liberalization of the electricity sector) and no. 164/2000 (liberalization of the natural gas sector) please refer to subsection 2.1.5, chapter 2

³² Mele, R., Parente, R., Popoli, P., *I processi di deregolamentazione dei servizi pubblici – Vincoli, opportunità istituzionali e condizioni operative*, volume II, Rassegna di contributi, Maggioli Editore, 2004: 110-111

emerged with greater clarity: liberalization itself has been seen as an opportunity for many, but also as a threat to others. The latter is the case of small-scale companies (including many former municipal ones, to which the Communal Councils – as seen - hold particularly) that, seeing the consolidation of large multi-utility players at the expense of minor subjects, started to resort to the gimmicks of alliances, mergers and acquisitions (the latter more rarely) in order to seek the "critical mass" needed to operate within the liberalized markets. Growing players and big established incumbents, instead, have had a radically different approach: looking at the evolution of the liberalization process, they have been those who have seen the opportunity to expand their business mix. As a matter of fact, the last few years' industrial plans show a common tendency to diversify the utilities portfolio on historically non-core chains. By the way, some observers have underlined that this process took place partially in response to the margins contraction in the energy sectors: it is worth noting, however, that Italy is remaining more attractive than the other European countries from these businesses perspective - with special reference to power generation, which particularly interests A2A, Hera and Acea -, thanks to higher overall electricity and natural gas prices which obviously ensure a higher cash generation.



Figure 4.1: Italian vs. European energy prices (electricity and natural gas) – ϵ/MWh

Source: personal elaboration on Equita SIM estimates

In other words, the service lines portfolio's diversification process has started to get a foothold in the multi-utility industry surely for a managerial willingness to achieve a better-balanced business exposure, but actually for a given volition to aggregate – as much as possible – those which had been the municipal utilities under the consolidating industrial players. Findings regarding the underlying reasons and dynamics of this process are deeply analyzed in the following sub-paragraphs.

4.1.1 From the "big merger" project to "small steps" growth: consolidation remains the target

During 2014, in the Italian Government table there took place a discussion about a giant mergers and aggregations operation which – in one or more stages – should have drastically reduced the number of the Italian utilities and multi-utilities. A project that could have replicated in Italy what already happened in Germany, where large municipalities found a great – political and industrial – deal in the late Eighties of the last century that led to the birth of RWE, the second German operator after E.On. The Italian Government, in fact, wanted to cut the large number of former municipal companies (5,264 according to a "Spending Review" study), making them no more than a thousand and forcing the closure of long-term unprofitable companies. The project foresaw that the industry's consolidation would take place around the largest players – namely A2A, Hera, Acea and Iren – following a logic of territorial contiguity as well as of specialization, creating national champions in energy, water and waste treatment: in this way, the planned public expenditure savings would reach up to 2 billion euros. The next step was to get to the creation of a single subject that put together the four major listed companies, also in order to build a governance in which the Municipalities, diluting themselves in the equity, would have been less invasive thus leaving more space for market and investors.

But of that project remain only the studies (even of the investment banks). The difficulties of having an agreement between too many shareholders, together with a never too favorable political context, pushed the multi-utilities in the opposite direction. Instead of growing with large mergers, the quartet of the listed companies

preferred to move with small acquisitions, choosing target companies in the neighboring geographic areas, or – alternatively – favoring businesses that could complete the range of services offered, thus proceeding for business lines. A process that has progressed rapidly and that in 2016 led to a record of acquisitions in the industry.

As a matter of fact, although in a more "silent" way than the market would have probably expected, M&A in the utilities segment is progressively increasing. The commitment of the Government towards the arguments of a lower fragmentation, higher efficiencies, better usage and spending review have been progressively turned in a series of legislative interventions which, in a way or another, are progressively sustaining the external growth opportunities.

The level of fragmentation in Italy, in fact, is still very high, with around 1,500 enterprises with public participations, operating in the network services of the energy, water and waste sectors (as identified at the end of 2012). Mainly located in the South of Italy, in 62% of them the production value is lower than 10 million euros. As highlighted in the document for the "Spending Review", the two sectors in which fragmentation is higher are water distribution and waste ones.

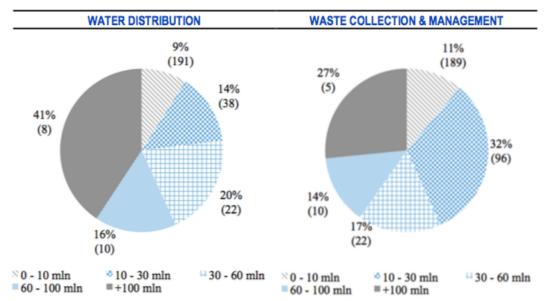


Figure 4.2: number of companies and relative turnover for water distribution and waste sectors

Source: "Spending Review" document on municipalities

At an aggregate level, the independent company Equita SIM³³ has identified around 120 municipalities not currently controlled by the main listed company, out of which around 60 only in the North-Center of Italy with an EBITDA potential of 1.9 billion euros.

Region	companies	EBITDA
Valle D'Aosta	1	199
Piemonte	10	254
Liguria	4	67
Lombardia	9	228
Trentino-AltoAdige	2	415
Veneto / Friuli	10	322
Emilia Romagna	1	44
Marche	5	60
Toscana	9	136
Umbria	2	5
Lazio	7	170
North-Central Italy	60	1,900

Table 4.1: local utilities not controlled by A2A, Hera, Acea and Iren

Source: Equita SIM estimates

As anticipated above, given the level of utilities industry's fragmentation, the Italian Government has implemented a series of legislative interventions to facilitate the market concentration:

 Exclusion of proceeds from disposals, from the "Stability Pact". In order to keep the public debt under control, some years ago the so called "Stability Pact" has been introduced in Italy. The Pact forces local municipalities to use the proceeds from extraordinary deals, to reduce the overall indebtedness. The cited "exclusion" from the "Stability Pact" allows municipalities to use proceeds for current expenditures, hence for investments and to enhance services on the territories. This measure surely represents a strong incentive for mayors and it has also some "political" strength, as it allows to sustain investments in the territories.

³³ Equita SIM report on Italian Utilities (September, 2016)

- Extension of the concession in case of merger. The extension should match the longest maturity of the merged groups. Extension could apply (regarding water distribution and local transport networks) up to 22 years for companies listing at least 60% or selling 49.9% to private shareholders.
- 3) *Enlargement of the reference areas for the tenders*. Thus putting smaller operators into troubles.
- Possibility to get access to a special fund (around € 600 million) made available by Cassa Depositi e Prestiti. CDP also confirmed the commitment to sustain the aggregation process through direct involvement in the capital.
- 5) *The obligation (for the municipalities) to present a "rationalization" program.*
- 6) Forced closure of companies with a certain number of years with losses in the accounts.
- 7) Limits to local governments in terms of number of participations and in terms of maximum stake of public entities hold.
- 8) Specific regulatory changes in the water segment, pointing at the reduction of the number of companies.

While the just mentioned interventions had the effect to at least make the companies focusing back on the M&A front, the Government and the Energy Authority has started to work to additional measures like:

- The inclusion of the waste segment among the sectors under the control of AEEGSI, the Italian regulator for electricity, natural gas and water services.
 Undoubtedly, increasing the visibility and the profitability of the sector with a regulation similar to the electricity and gas one (which foresees RAB: allowed returns and efficiency requirements) may increase the "appeal" of the water sector on the M&A front.
- A system of penalties (including the declaration of fiscal damages by the Supreme Fiscal Court) in case of missing implementation of the rationalization program indicated in point 5 above.

As a consequence of the described framework, a push towards the implementation of an aggregation process for the coming years is now more "credible", as well as testified by the operations presented, under discussion or already closed in the last period.

4.1.2 The strategic influence of CDP (and F2i)

Within the utility industry in Italy, there is also the presence of prominent state financial institutions which, through shareholdings or - more generally - with significant investments, play a crucial role in influencing the dynamics of the industry in question. Among these, the major actor is represented by Cassa Depositi e Prestiti (CDP), formally a joint stock company controlled for about 83% by the Italian Ministry of Economy and Finance and about 17% from various Italian banking foundations. CDP operates in the Italian economic system essentially as a state bank, with operations similar to that of a business bank, having among its various principal activities also the participation in the equity of medium and large domestic companies (listed and not listed) considered strategic for the development of the country. Its main resource for collecting financial resources is the entire Italian postal savings that CDP has been managing since 1875. The latter is supplemented by the bond collection carried out on markets, as well as at institutional and retail investors. Financial resources are mostly employed in loans to the State and local governments, in investment in the equity of Italian companies operating abroad and in participation in real estate, infrastructure and financial projects considered strategic for the development of the national economy. By the way, CDP's latest works include the strong investment in optic fiber with "Open Fiber" (joint venture between CDP Equity and Enel S.p.A.), as well as being a strong shareholder in companies such as Snam, Italgas and Terna, strategic realities for Italy.

In January 2007, at the initiative of the same CDP, there took place the birth of F2i "Fondi Italiani per le Infrastrutture" SGR S.p.A., an Italian savings management company which holds the relative Funds F2i I and II. Its mission is to become a long-term investor and partner in the infrastructures sector in Italy, working both in the field of corporate structure modification processes (including privatizations) and development processes. Through its Funds I and II, F2i holds relevant shareholdings in – among the others – F2i Reti (which, in turn, holds 2i Rete Gas – formerly Enel Rete Gas –, the second operator in the gas distribution sector in Italy after Italgas) and F2i Rete Idrica Italiana (which, in turn, holds shareholdings in some Italian water

supply operators), as well as it has already performed some operations with Iren S.p.A. in the environmental sector.

Company	Reference Atem	Total Pdr in Atem	Pdr owned Pre Tender	% control of Atem	Main competitor	% control	Tender result (assumed)	Pdr owned post tenders	Growth post tender
IREN	Piacenza 2	57,188	3,251	6%	2l Reti Gas	38%	Lost	0	-100%
	Parma	212,631	145,836	69%	Gas Plus	6%	Win	212,631	-100% 46% 6%
	Reggio Nell'Emilia	226,548	214,004	94%	Goldengas	3%	Win	226,548	
	Genova 1	335,938	328,294	98%	Italgas	2%	Win	335,938	2%
	Genova 2	110,273	1,837	2%	Italgas				
	Totals	110,275	693,222	2 /0	llaigas	89%	Lost	0 775,117	-100% 12%
A2A	Piacenza 2	57,188	2,857	5%	2i Rete Gas	42%	Lost	0	-100%
	Alessandria 4	51,649	4,289	8%	2i Rete Gas	39%	Lost	0	-100%
	Milano 1	837,256	794,709	95%	2i Rete Gas	4%	Win	837,256	5%
	Milano 3	245,222	11,716	5%	2i Rete Gas	30%	Lost	0	-100%
	Milano 4	240,430	24,393	10%	Italgas	45%	Lost	0	-100%
	Bergamo 1	75,801	8,497	11%	Unigas	35%	Lost	0	-100%
	Bergamo 2	64,704	27,422	42%	Erogasmet	18%	Win	64,704	136%
	Bergamo 3	84,925	4,022	5%	2i Rete Gas	55%	Lost	0	-100%
	Bergamo 4	118,574	16,379	14%	2i Rete Gas	67%	Lost	0	-100%
	Bergamo 5	96,971	4,290	4%	2i Rete Gas	46%	Lost	0	-100%
	Bergamo 6	74,996	14,365	19%	2i Rete Gas	61%	Lost	0	-100%
	Brescia 1	56,134	5,130	9%	Valle Camonica	53%	Lost	0	-100%
	Brescia 2	51,811	22,153	43%	As Valtrompia	29%	Win	51,811	134%
	Brescia 3	194,186	70,966	37%	Gas Plus	45%	Win	194,186	174%
	Brescia 4	134,887	34,234	25%	Erogasmet	15%	Lost	0	-100%
	Pavia 4	72,997	3,646	5%	2i Rete Gas	39%	Lost	0	-100%
	Cremona 2	51,447	23,579	46%	Linea Distrib	33%	Win	51,447	118%
	Cremona 3	63,677	46,023	72%	2i Rete Gas	19%	Win	63,677	38%
	Lod 1	57,731	25,666	44%	2i Rete Gas	51%	Lost	0	-100%
	Trento 3	59,672	930	2%	Dolomiti Reti	54%	Lost	0	-100%
	Piacenza 1	85,204	1,921	2%	2i Rete Gas	75%	Lost	0	-100%
	Chieti 1	93,815	8,109	9%	2i Rete Gas	51%	Lost	0	-100%
	Chieti 2	59,775	11,961	20%	2i Rete Gas	41%	Lost	0	-100%
	Isernia	33,135	213	1%	2i Rete Gas	39%	Lost	0	-100%
	Campobasso	87,565	143	0%	2i Rete Gas	47%	Lost	0	-100%
	Salerno 2	84,536	5,983	7%	Salerno Energia	61%	Lost	0	-100%
	Pavia 1	74,428	7,332	10%	Asm Vigevano	43%	Lost	0	-100%
	Pavia 2	62,319	58,427	94%	2i Rete Gas	6%	Win	62,319	7%
	Cremona 1	51,511	26,981	52%	Gei Impianti	27%	Win	51,511	91%
	Lodi 2	55,312	579	1%	2i Rete Gas	47%	Lost	0	-100%
	Padova 1	215,850	2,645	1%	Edison	16%	Lost	0	-100%
	Totals	210,000	1,269,560	170	Luison	1078	LUSI	1,376,911	8%
	Madans 4	000.000	147.407	E 40/	An Detiron Ort	200/	105-	000.000	070/
HERA	Modena 1	230,892	117,137	51%	As Retigas Srl	39%	Win	230,892	97%
	Modena 2	112,966	83,658	74%	Co.I.Me.Pa S.R.L.	8%	Win	112,966	35%
	Bologna 1	318,384	292,802	92%	Mattei Italiana Gas S.R.L.	1%	Win	318,384	9%
	Bologna 2	163,519	119,797	73%	Italgas	6%	Win	163,519	36%
	Ferrara	182,825	31,405	17%	Edison D.G. S.P.A	42%	Lost	0	-100%
	Ravenna	196,274	143,614	73%	Italgas	22%	Win	196,274	37%
	Forlì Cesena	171,564	143,824	84%	2l Rete Gas	12%	Win	171,564	19%
	Rimini	193,315	21,636	11%	Sgr Reti S.P.A.	81%	Lost	0	-100%
	Pesaro E Urbino	129,558	72,221	56%	Sadori Reti S.R.L.	34%	Win	129,558	79%
	Totals		1,026,094					1,323,157	29%
ACEA	Not Present			-					

Table 4.2: results and effects of the tenders that are currently taking place for the gas distribution³⁴

Source: personal elaboration on Equita SIM estimates

³⁴ The purpose is to show the increasing relevant role played by F2i (through 2i Rete Gas) in the natural gas distribution business at the expense of the main multi-utility Groups.

The Iren Group in 2013 also received a loan of 100 million euros (and 15 yearsmaturity) by CDP, while in 2016 the company Hera Luce – belonging to the Hera Group – and CDP itself signed a long-term financing of about 21 million euros. Moreover, the proposal advanced in 2012 (which then did not take place) to merge Iren and Hera is part of the range of operations promoted by CDP to favor the consolidation of the public utilities industry. As a matter of fact, in the last few years CDP has represented the financial institution which is most trying to promote aggregations and to push the growth of the consolidating multi-utilities realities (as has already been possible to notice in the Italian Government's measures described in section 4.1.1 above), with the clear goal of overcoming the companies "nanism" typical of the industry, but it has often struggled with the lack of availability in setting aside by the Municipalities.

In the next future, CDP will play a twofold role. First of all, by participating in those deals where local utilities have too much leverage and would not be appealing targets from an M&A perspective. Secondly, by aggregating local utilities in South-Italy, with the support of some Italian or international industrial players. As a matter of fact, in the growth strategy of the listed multi-utilities there is still a "black hole" represented by the regions of southern Italy. This latter area could represent a further growth opportunity for the entire industry, given the demand for quality public services that could be met. However, the intervention in these contexts should be accompanied by a favorable institutional framework and not be entrusted to the goodwill of individual companies alone.

4.1.3 The role of Enel, Eni, Italgas and the other great utilities incumbents

The fragmentation of the Italian utilities industry is also due to the strong presence of large companies such as Enel, Eni, Italgas, Edison in some business lines (in particular, in the electricity and natural gas chains where they have always been operating) which now represent the target of expansion and consolidation of the multiutilities. Moreover, the aforementioned players (Italgas in particular) are now working on acquisition operations and in general in the tenders for the assignment of concessions for the natural gas distribution service.

However, this framework should not complicate the affirmation of the multi-utility model. The role of the aforementioned parties, on the contrary, is a stimulus for subjects such as A2A, Hera, Acea and Iren to seriously perform a consolidation process in the various sectors in which they operate. In fact, operators such as Eni, Enel or Italgas demonstrate that size is a key lever for investments, quality of services, and cost efficiency. The consolidation process in sectors such as gas distribution or energy sale will have as a natural basis the coexistence of large historical players alongside multi-utilities strongly concentrated on some territories.

4.2 Analysis of the M&A outlooks for the main Italian multiutilities

The four major Groups are currently expanding mostly for territorial contiguity, but each of them tends to do so more and more in the same business lines: in other words, each company is developing one or more core activities with the aim of exploiting as much as possible the resulting scale and learning economies. This is evidenced by the fact that Acea is the first national operator in the water distribution, Hera is the first national waste treatment operator, A2A is the second national operator (after Enel) in the electricity generation and Iren is specialized in electricity and thermic generation. However, this process does not go against the multi-utility model as originally thought. The four former municipal companies continue to be *multi*-utilities even though each one presents a territorial/national leadership area: electricity distribution, natural gas distribution, integrated water cycle, waste collection and treatment, electricity and gas sale, electricity generation, district heating and public lighting are activities possible to be found basically in all four. But, of course, these activities are generally carried out on a well-defined territory.

The following analysis shows the profound heterogeneity in business settings, and the companies' operating maps clearly indicate the territorial segregation between the different Groups' activities.

4.2.1 A2A could be an aggregator both in Lombardy and at national level in the waste business and in network services.

More than a year ago, A2A has stipulated a joint venture (acquiring the 51%) with Linea Group, a multi-utility company in South-Lombardy (controlled by the Municipalities of Lodi, Rovato, Pavia, Crema and Cremona). At the same time, A2A has already identified new targets, always following the model – repeatedly confirmed by the management – of the "Multi-utility of the Territories", which does not have as a goal to take over *sic et simpliciter* other businesses but to network with them enhancing their strengths. The idea now is to aggregate four more multi-utilities in

Lombardy: AEVV (Azienda Energetica Valtellina Valchiavenna), Lario Reti Holding (operating in Lecco), ASPEM Varese and ACSM AGAM (Monza and Como). Of course, other smaller-scale acquisitions have already been pointed out by the group, for example in the environmental chain or in energy efficiency.



Figure 4.3: A2A reference territory – Local utilities

Source: personal estimates on companies' data

A2A can play a crucial role in aggregations for the following reasons:

- It is the biggest Italian multi-utility and it can carry out an aggregating role both in waste – where it is the second national player – and in network services, although it only has a negligible presence in the water supply sector. Moreover, thanks to its strong presence in the power generation sector as well as in the natural gas sale business, it has more opportunities to generate synergies in the energy area.
- It has changed its governance and gone back to the traditional model, with the openly declared aim to aggregate other local utilities. The fact that the Milan

and Brescia Municipalities control the company could be a disincentive to aggregate smaller entities.

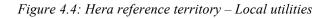
Currently, in Lombardy there are 10 unlisted companies under public control that A2A could potentially integrate for estimated EBITDA of \in 220 million (roughly 18% of A2A's 2016 EBITDA).

4.2.2 Hera is the best positioned for geographical aggregations.

M&A is a constant in strategic planning and track record of the Hera Group. All these processes, starting with the great initial merger that gave birth to Hera, mainly followed a logic of geographic expansion (or better, *territorial contiguity*), being the Group's activities mainly based on natural gas, water and electricity networks – together with, as seen, the waste collection and treatment services –, which reach growing synergies the greater their interconnection is. As a matter of fact, its expansion initially regarded the North-East (Veneto and Friuli Venezia Giulia), then continued through the Marche region, and reached Abruzzo with the acquisition of Julia Servizi of Giulianova (within the natural gas sector, where the group has a strong presence). Other acquisitions include Cogaspiù of Ortona, Alento Gas of Francavilla and Fucino Gas of Luco dei Marsi.

In an interview with "Il Sole 24 Ore" in August 2017,³⁵ Hera's Chairman stated that the Group is particularly interested in the liberalized markets of energy sale and waste treatment, as they are regarded as sectors with interesting opportunities in which, moreover, Hera has achieved six aggregation operations in just over a year-time. As a matter of fact, in 2016 Hera acquired Gran Sasso (seller of electricity and natural gas) and the companies active in the waste sector Waste Recycling, Geo Nova, Aliplast as well as the plants branch of Teseco.

³⁵ Montrasio, T., Hera, le fusioni non sono finite, Il Sole 24 Ore, 25/08/2017





Source: personal estimates on companies' data

Hera seems to be better positioned for further geographical aggregations due to the following reasons:

- It is present in 5 regions, namely Emilia, Veneto, Friuli Venezia Giulia, Marche and Abruzzo, besides operating a WTE in Molise.
- It is the result of the aggregation of the former municipal companies in Emilia Romagna and, since its listing, it has never stopped integrating other utilities. Its operational model (based on local operating companies) favors the M&A process.

- Its public shareholdings, broken down among more than a hundred Municipalities, makes the public presence in the company governance less intrusive.

Furthermore, in the regions where Hera is already present there could be some 16 other non-listed companies under public control that could be absorbed for an estimated EBITDA of \in 320 million (35% of Hera's 2016 EBITDA).

Finally, Ascopiave (around \in 100 million EBITDA) is the other listed company in Veneto and it could be incorporated into Hera, although it must be pointed out that the Treviso-based company awards interesting dividends to its public shareholders (roughly 93 Municipalities), thus making its disposal less appealing.

4.2.3 Acea has interesting aggregations opportunities in Tuscany, as well as looking to the South. Is the Rome Municipality ready to reduce its stake?

For the Acea Group, the growth strategy concerns in particular the water sector. As a matter of fact, over the past two years the Rome-based multi-utility has acquired:

- the 100% of Severn Trent Italia from the Severn Trent Plc Group and, indirectly, the 64% stake in Umbriadue Servizi Idrici (Acea already owned 34% of Umbriadue Servizi Idrici through Crea Gestioni S.r.l., consequently the participation in Umbriadue has risen to 98%) and the 80% in Iseco;
- the 19.2% of Gestione Esercizio Acquedotti Lucchesi GEAL (Acea already held 28.8% of GEAL through Crea S.p.A., consequently the participation in GEAL increased to 48%).

However, as declared in the Group's 2016 Management Report, Acea renounced to the announced acquisition of 100% of Idrolatina from the Veolia Group at the end of May 2017 due to the negative opinion expressed by the Municipalities concerned by the operation.³⁶

³⁶ Acea S.p.A.'s 2016 Management Report



Figure 4.5: Acea reference territory – Local utilities

Source: personal estimates on companies' data

Acea has potentially interesting aggregation opportunities in Tuscany, where it holds controlling or qualified majority stakes in 5 ATOs (water's optimal distribution zones), and in Umbria, where it controls the Perugia ATO. The company could aggregate the waste sector as well, which is rather fragmented in Tuscany and Lazio. In Tuscany and Umbria, excluding the companies in which Acea holds a stake, there are some 10 unlisted companies under public control that Acea could potentially integrate for estimated EBITDA of \in 140 million, i.e. 16% of Acea's 2016 EBITDA. However, Acea has never aggregated any other former municipal company in the past and the Rome Municipality holds the absolute majority in the company and it does not seem to have any intention to reduce its stake. Therefore, in the new potential scenario Acea will have to prove its ability to act as a real aggregator.

4.2.3.1 The Acea 2.0 project

As part of the plan aimed to increase processes efficiency, the Acea Group launched in 2014 a project for the development and integration of information systems used by the various departments of the Group's companies with the goal of becoming the first *digital* multi-utility: this project has been named *Acea 2.0*. The development of this project has obviously employed financial resources that could have been aimed at the expansion goals of the Group, but, however, in the eyes of the Company, of the market as well as of the citizens, this type of investment is not less important than the ones aimed to improve the infrastructures or to consolidate the company.

The digitalization of company services is an inevitable path for the multi-utilities "of the (next) future", particularly in support of the infrastructures. Digitalizing the networks means using the latest generation technologies to support the design, implementation, operation, monitoring and maintenance of the infrastructures. In other words, new technologies allow to give a "digital identity" to the networks through the industrial IoT, namely a multitude of sensors that gather information, interact with each other, and can communicate the collected data by increasing the capacity of analysis (*big data analytics*) and, therefore, the precision and speed of business decisions. The ability of the technology to carry out these operations (in some cases autonomously) will increase in the coming years with the gradual maturation of advanced solutions such as robotics, AI (*artificial intelligence*) and *machine learning* (i.e. machine self-learning skill).

As an example similar to the Acea 2.0 project, Italgas has adopted the IoT for its natural gas distribution network tele-control, cathodic protection, meters tele-control and tele-management, and to enable the operating personnel to communicate with the installed sensors through their own iPads. The network is already represented in digital form on cartography, in turn available on the iPads of the technicians. The same technicians receive project planning in digital form and, when operating, they can capture documents such as digital photographs and digital signatures, detect anomalies by interacting with the plants, and check the activities carried out thus reducing errors and back office activities.

In conclusion, Acea (as well as Italgas) will have the possibility to exploit this competitive advantage reached by transmitting the described "next-generation"

business features – which, in perspective, surely look towards *Smart City*'s new services – to the companies acquired in the future.

4.2.3.2 The strategic opportunity of Southern-Italy

Southern-Italy represents an area that has not already seen any particular aggregation process in the utilities sectors so far (and at the same time, as seen above, presents an high level of fragmentation) and constitutes "fertile ground" for Acea given the link of territorial contiguity. By the way, the Rome-based multi-utility is already present in the South of Italy, precisely in the water sector. However, consolidation in these areas is also often curbed by those who should give up e.g. shares of water companies, but very often they do not. It is worth citing the case of ABC (Acqua Bene Comune), Neapolitan water management company: corporate events (in August 2017 the company was declared in bankruptcy by the Mayor of Naples) do not guarantee that the company faces in a structured way the complex water situation in its areas of competence, in particular for what regards the need for significant investments. There are many realities in this situation even in other sectors such as gas distribution, where the strong presence of public bodies in the companies' shareholdings restrains the investments or - worse - refreshes them with a more political and less business vision. Anyway, Acea, given its geographic position as well as its water distribution leadership, can surely play a key role in consolidating and developing the small infrastructural realities that operate in the South of Italy.

4.2.4 Iren: a lot of opportunities in North-Western Italy.

As of January 2016, the Iren Group has reached 80% of TRM (Turin's waste-toenergy plant), increased its stake from 40% to 60% in Atena (Vercelli's multi-utility), and has come to hold 45% of GAIA, a company active in the environmental management (waste disposal and treatment) in Asti. In addition, Iren has acquired water concessions in about 30 Municipalities in the North-West of Piedmont, as well as the special waste dump in Collegno (Turin). Furthermore, at the end of June 2017, the multi-utility submitted an offer for the privatization of ACAM La Spezia, while in July it collided with the Municipality of Genova on the question of AMIU (a local waste company in serious cash-liquidity crisis) for which Iren had developed an important development plan.



Figure 4.6: Iren reference territory – Local utilities

Source: personal estimates on companies' data

Iren could play an aggregating role in North-Western Italy. In the Piedmont region, there are some medium-sized enterprises which could constitute its target. At the same time, the discussed merger with SMAT – the large water distribution company in the Turin province with roughly \in 152 million EBITDA (19% of Iren's EBITDA) – would increase the Turin Municipality's stake in Iren and it could therefore be hindered by the other public shareholders.

Finally, it will be interesting to see which role (if any) will be played by Iren in Southern-Italy, given the solid stake (50%) it currently holds in Salerno Energia Vendite.

5. Analysis

In this chapter the theoretical and empirical findings are collectively analysed with the goal to extrapolate relevant information with regard to the research objective.

The overall analysis discussed in this chapter is carried out by considering the internal and external data collected in the previous "Empirical Findings" part, as well as the relevant information gathered in chapter 2 of the present Thesis. Both sources are merged together and compared through the development of three sequential sections, each of which represents the crucial factors driving the *extraordinary finance* operations in the multi-utility industry in Italy. The attention is obviously focused on this last aspect.

5.1 Political and regulatory drivers: the underlying key

As it is clear at this point of the work and in the light of the findings reached in the previous sections, aggregation processes and business management cannot be considered as exclusive drivers of transformation in an environment such as the utilities industry in Italy: they should rather be understood as responses to the development of factors that are not directly controllable by companies themselves. Political decisions and pressures (both at local and national level) have always constituted, at the same time, an inevitably intrinsic aspect as well as a factor influencing strategy and industrial policy's alterations at corporate level.

As it has been analysed, the project that the Italian Government, together with business banks, planned in order to give rise to the creation of a single entity that would bring together the four major listed companies (A2A, Hera, Acea and Iren) – aiming to lead the industry to a true national-scale consolidation –, is periodically

repurposed. More generally, the political-industrial willingness (perhaps more than the real need) to create a "national champion" capable of incorporating the best experiences emerged in the former municipal companies' industry remains the target for the Italian context, having as benchmark the Germany's RWE's success story.

For sure, the role of the Municipalities – which fear, with the introduction of new governance models, to lose the control of former municipal companies as majority shareholders – has not facilitated the industry consolidation. Moreover, the invitation by various successive Governments to reduce the number of companies hold - or partially hold – by the Municipalities has not produced any significant results. However, the above-mentioned project partly took place and is currently taking place, even though with significant differences: A2A and Iren are proceeding with territorial consolidations (ACSM, Linea Group, ASPEM Varese for A2A and ACAM S.p.A. for Iren) through, in most cases, direct acquisitions. Hera's policy, instead, is different. The Bologna-based Group has - actually since its foundation - undertaken an aggregation policy based on stock exchange: Municipalities shareholders of small/medium-sized companies are offered shares of Hera itself, and the result is that Hera's shareholding is made up of an increasing number of Municipalities, which become less and less relevant in the effective business management, thus favouring the managerial administration of the Group. However, it is worth noticing that in all cases, the single Municipality or the Municipalities continue to hold the majority of the shareholding. This overwhelming presence of the Municipalities in the equity strongly limits the companies' investment, expansion and consolidation capabilities, since it does not fundamentally allow the entry of "fresh" capital by new (institutional and market) investors. More generally, the presence of public bodies, with different percentages and quotas in the multi-utilities' shareholdings, is more likely to drive the companies' choices towards other investments than those required. However, it represents a good example to be followed what happened in A2A, where the Municipalities of Milan and Brescia have decided to drop to 42% from the previous 50% of the shareholding. It is still a first step, but it helps to understand that Municipalities can govern companies even with smaller shares, collecting fresh capital with the quotas sold. Financial resources, these latter, useful also to develop other services for the citizens.

Nonetheless, against the usual "uncertainties" that have historically characterized the Italian utilities space, the regulatory framework has significantly improved in the last three years. With the Government in the look for higher investments, improved efficiencies, enhanced security of supply as well as a higher market concentration and lower tariffs, different measures have ensured a more stable and supportive regulatory framework. In the following table a summary of the main reference interventions in the segment of the last 36 months is provided.

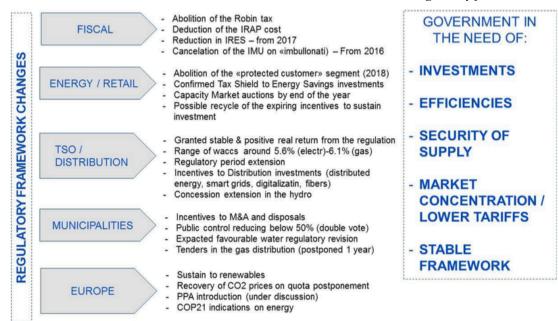


Table 5.1: main latest Government's decisions on the multi-utilities regulatory framework

Source: personal elaboration on data published by the Italian Ministry of Economy and Finance

The first steps taken by the Italian Government to address the problem of excessive fragmentation in the industry were present within the "Stability Law" of a couple of years ago. In particular, as seen,³⁷ a rule was issued which allowed the mayors to spend on investments, even outside the "Stability Pact", the sums recovered by the eventual sale of their "family jewels", as well as it foresaw penalties for those who want to maintain loss-making companies with the obligation to "consolidate" them into municipal budgets. At the same time, Cassa Depositi e Prestiti, whose Strategic Fund

³⁷ For a further insight on the latest legislative interventions implemented by the Italian Government to facilitate the utilities market concentration please refer to section 4.1.1, chapter 4

has made available 600 million to acquire shares from the municipalities and favor aggregations, played and is playing a key role in terms of financial support, seeking to encourage aggregations between companies operating in the utilities industry, with the clear goal of overcoming the companies' "nanism" distinctive feature.

With the "Madia Decree", then, the situation has come to a turning point. Taking the case of Lazio Region alone, on 65 companies held by the main Municipalities, due to the cited Decree "only" 29 will remain. In the City of Rome alone, there are companies held or partially held by the Municipality in all the major utilities sectors and the levels of services are very poor. Public Administration budgets, in fact, no longer allow to deal with local public services unless providing a poor service which stays definitely below the levels of the other European capitals.

Yet, at least at the moment, this seems not to have convinced many of the municipal administrations. The process has slowed down over time because it is difficult for municipalities to take a step back with respect to the shareholding of the utilities companies held. However, it seems paradoxical that the national Government is pushing to one direction while the local governments oppose it. This even more, as seen, in the regions of Southern Italy, where there is, now more than ever, the need to gradually rethink the presence of the Public in the local utilities sectors. *A fortiori* because this "behaviour" is at the expense of efficiency gains of which the citizens could benefit first. It should not be forgotten, in fact, that the latter represent the first real stakeholders of those which, until a few years ago, were just companies of the Communes, i.e. "of the communities".

5.2 Industrial drivers: the economy and efficiency reasons

When it comes to M&A operations in the utilities sectors, it is taken into account that listed groups, by acquiring smaller realities, can provide a qualitatively better service to customers as well as more investments due to their asset strength and industrial capacity. Nevertheless, it is interesting to remember that at the time of liberalization/privatization processes in the industry, the Legislator's intent was to try

to implement as much as possible the competitive dynamics which, at the same time, could led to an increase in the quality of services and to a reduction of costs for end users: this through the participation of small and medium-sized companies in the tenders, the same companies that now represent the target of acquisitions by large groups. It was then understood, however, that excessive fragmentation, exactly as the former excessive concentration of subjects operating in a sector, is never good for competition and certainly does not bring benefits to consumers.

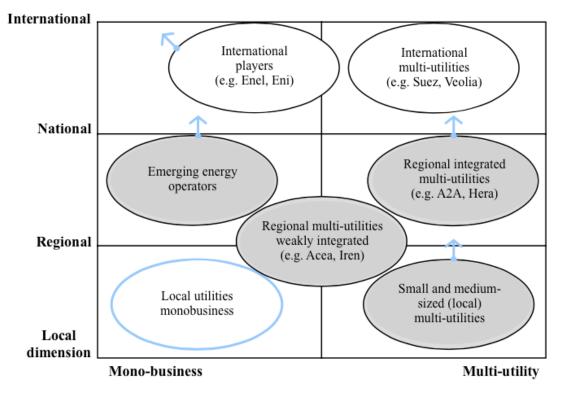


Figure 5.1: size, positioning and transformation dynamics in the utilities industry

Source: personal elaboration

For example, in the natural gas distribution business, there are currently about 220 operators in Italy (number that will be significantly reduced at the end of the tenders that are taking place). The 77% of operators are small or very small and, as a matter of fact, it distributes little more than 10% of the total gas nationally distributed. This means that many operators have an almost municipal dimension. These operators are not able to support the investments needed to modernize the networks, nor do they have, for example, the normative obligation to replace old meters with "smart" meters.

Moreover, the recognition of operating costs (by AEEGSI, the Italian Authority for energy – electricity and natural gas – and water services) is higher for small businesses than for large ones, resulting in increased costs for the end customers. The utilities industry's consolidation process sees, in fact, the following advantages for the end users:

- increased investments to modernize the assets (networks or other);
- improvement in the quality of the services offered;
- cost efficiency that translates into "lighter bills".

By the way, the aim of the A.te.m. (i.e. minimum territorial scopes) tenders to allocate the natural gas distribution service is to create an adequate level of competition, guaranteeing the investments needed to modernize the network, improving the quality of services and reducing operating costs. Nevertheless, the Antitrust Authority intervenes in order to avoid dominant positions in individual A.te.m. as a result of M&A transactions, positions that could compromise competition exactly in the occasion of the cited tenders for the award of the concessions.

As discussed in the second part of the "Empirical Findings" of the present work, the efficiency purpose just described is also reflected in the process of specialization in certain specific business lines that the main multi-utility groups, while maintaining the nature of *multi-services* companies, are implementing with the goal of creating their own territorial/national leadership area. In conclusion, this process is anchored to the undisputed affirmation according to which the union of size and specialization constitutes a key lever for investments, quality of service and cost efficiency.

5.3 Macro-economic and systemic drivers

With roughly a +7% total return, the listed Italian utilities ("IT7000", among which there are also A2A, Hera, Acea and Iren) have significantly outperformed both the Italian equity market and the European utilities during 2016. This is mainly due to:

1) A significant improvement of the regulatory framework, as already deeply analysed.

- 2) The benign interest rates environment, which have started to have a relevant impact on the reduction of interest charges in the refinancing process as well as to increase the appeal towards the high dividend returns of the industry. Mainly thanks to the ECB manoeuvre on the QE, but also thanks to the stabilization of the EU and Italian economy, the reference 10-years-maturity Italian Government Bond rate have collapsed from the 7% peak of 2012 to the current 1.9-2.3% roughly. This, coupled with the more accessible debt market, has significantly contributed to take down also the reference bond curves of the utilities segment. Easy to understand that, for a capital-intensive industry like the utilities one, this is a significantly positive driver of income performance. In front of a mature market, in fact, the reduction of the interest rate costs, together with the expected cut in the corporate tax rate (from 27.5% to 24%) is transforming in one of the major driver of net income growth in the coming years. For the main utilities companies, in fact, cumulated potential benefits through 2020 are estimated up to 10% of net income.³⁸
- 3) The strong cost cutting measures: from the procurement contracts revision as well as on personnel from the facilitated legislation on lay-off ("Fornero Law"). Companies are declaring expected savings in the region of 8-12% of EBITDA through 2019-2020.39
- 4) The good performance of the retail business and the partial recovery of sparks spreads: with reserve margin reduced on capacity closure and commodity collapsing more rapidly than the electricity prices.

The above mentioned elements have leaded to better than expected results in the industry during 2016 (and consequently performance), despite the energy scenario was still deteriorating on the back of the very weak commodity prices.

In such a scenario, there is a potential value creation for the four main listed multiutilities. A2A, Hera, Acea and Iren, in fact, are those which hold efficiencies that could be easily enlarged to new businesses acquired, to the benefit of revamped growth (through external lines) and efficiencies implementation.

 ³⁸ Equita SIM estimates
 ³⁹ *Ibidem*

6. Conclusions

This last chapter is mainly aimed to discuss and contextualize the solution founded in reply to the Research Question presented in the Introduction, and which has been followed during the whole Research process. Moreover, future research topics are ultimately suggested considering the subjects of this M.Sc. Thesis.

As widely seen in the overall analysis carried out in the present paper, a key driver in the local public utilities industry in Italy is represented by the legislator and by the regulatory innovations it has introduced into the system over time, which have been (and are) able to precisely guide the trends of the market in question. This phenomenon, however, is physiological in an industry such as the one of the utilities where market failures occur, in turn mostly due to the presence of essential facilities (non-duplicable or substitutable infrastructures) along the various production chains, that make the public intervention indispensable in the field of regulation. But in the whole evolution course of the public utilities, from the constitution of the first municipal companies (following the issuance of the 1903 Law) to the present situation, the choices of the Italian legislator often (not to say always) emerged as an expression of certain political decisions: local public utilities, as well as being a strategic industry for the transmission of economic policy impulses by central government authorities, have historically been a prerogative of local bodies, who saw (and see) in the utilities not only the benefit of dividend recovery, but also the ability to produce huge volumes of investments on the local systems.

The public utilities industry in Italy nowadays still undergoes a strong political denotation or, in any case, the presence of a local power lobby. Despite the first disengaging from the public-local reference shareholders through the partial opening of the capital to third parties, and in any case after the placing on the stock market of minority percentages of the equity shares, large Italian multi-utilities are still characterized by the presence (in some cases – see Acea – rather strong) of public

shareholders within their equity. Also due to this latter aspect, these companies maintain an industrial dimension that hardly goes beyond the macro-regional territory (with the exception of Hera, which, as seen, is imposing itself forcefully across the Adriatic dorsal), and this can actually constitute a major obstacle both in general to the consolidation of the industry and in particular in reference to the analyzed "Southern issue", which sees by definition a territorial *discontinuity* with the major multi-utilities Groups. Moreover, the latter, over the years, have opted to continue investing in infrastructures and services to essentially meet the needs of local policies, and just recently they have started to place resources in R&D and technological innovation. But the strong public-local presence in the multi-utilities' shareholding also prevented, in some cases, financial and/or industrial investors from entering the companies and/or actively participating in the business development. This inability to bring "fresh money" from third parties into the companies has led to a significant increase in the financial indebtedness of the multi-utilities, making them often unable to implement the adequate upgrading of infrastructures and services (on which, however, as seen, the investments have been partially focused) both in terms of renovation and technology. What just said is attested by the relevant problems in the water supply for the Municipality of Rome with which, in the just passed summer 2017, Acea had to deal with (the losses of the Rome water network are very high, with peaks up to 50% of water lost in the way from source to end users).

Also due to the aforementioned financial position and the weak flexibility in opening to new investors, the expansion and dimensional growth of multi-utilities players is happening, as seen, through small acquisitions. However, the operations that would help significantly to increase efficiency, size as well as to solve the problem of over-indebtedness – hence improving leverage – would be mergers, but the latter are not currently taking place. Mergers, in fact, would certainly represent the ideal solution for creating European players in the various utilities sectors, but the position of the municipalities-shareholders has so far prevented it. The acquisition of small companies remains the only viable route (some Groups have done and are doing it extensively, see Hera and Iren): it certainly creates value even if it is a road that takes a lot of time and effort.

Those who are reading this work may have realized that the solution to the Research Question that led this overall Research was already present between the lines of the analysis developed in the previous chapter. The just above considerations have been aimed at commenting and contextualizing that "trident" model that represents the ultimate result of this Thesis. It should be said that the three main drivers found at the end of this path, namely the political and regulatory, the industrial and the systemic ones – in the specificities faced in the Analysis chapter –, constitute, according to the outcomes of the present Research, the founding basis of *extraordinary finance* operations in an industry as complicated as fundamentally strategic as the one of the local public utilities in Italy.

6.1 Future research proposals

Given the constantly evolving nature of the industry studied, in particular due to the regulatory aspect that strongly affects it, future researches will maybe concern the evolutionary process and the dynamics that will take place among the local public utilities in the future.

Finally, an interesting topic, as already underlined in the text, will be probably to see the possible consolidation of the current medium-sized players present in the Italian market, which aim to flank in the future the established multi-utilities.

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Appendix

Interviews structure

Industry overview

- 1) Not long time ago, a pool of investment banks solicited by political pressure was planning the merger of the main four listed companies (A2A, Hera, Acea and Iren) in one single entity. This project, looking at what already happened in Germany with RWE, would have led to a strong consolidation of the Italian multi-utility industry. Is it possible to consider this plan still feasible or indeed it has been definitely abandoned (or even never taken in real consideration)? Is the interference of Municipalities that are worried of losing the control of the former municipal companies through the introduction of new governance structures the main factor affecting this decision or are there other aspects that should be considered?
- 2) Looking at the industry's trends, it is not difficult to notice some elements suggesting that the project previously cited is being implemented "indirectly". For example, the four companies already mentioned are growing in terms of territorial contiguity, but each of them tends to do it more and more in the same business lines. More precisely, each one of these Groups is developing one or more core activities with the aim of exploiting the deriving scale and learning economies. To demonstrate the concept just exposed, let's consider Hera in the environmental sector, A2A in the energy and networks businesses, Iren in the electricity and heat generation, as well as Acea in the integrated water cycle. In a medium-long term perspective, does this process represent a threat for the multi-utility model as it was conceived at the beginning? Is there a political interference also in this sense?

- 3) Considering M&A operations in the utility industry, it is a common belief that big listed groups, through the acquisition of smaller firms, can offer a superior service (qualitatively speaking) to customers. It is also commonly assumed that these companies can grant more investments thanks to their capital solidity and their industrial expertise. Nevertheless, through the process of liberalization/privatization of the different industry's sectors, the aim of the legislator was to encourage competitive dynamics which would have brought to an improvement of the services' quality and to costs reduction for final users: all this thanks to the participation of small and medium-sized companies to the tenders, the same companies that now represent the target of acquisitions by large groups. Does this process represent a sort of correction following a mistake or can we consider it as a return to the past? In this scenario, it is significant the fact some firms are under monitoring and obliged to obtain the authorities' consent to conclude their M&A transactions.
- 4) The utility industry in Italy is usually described as fragmented and the Government has undertaken many actions over the years in order to solve this problem. In the "Stability Law" approved two years ago, there was a clause that allowed the majors to invest the money coming from the disposal of "family jewels" even outside the main provisions of the "Stability Law" itself. Moreover, the latter also contained norms providing penalties for those who want to keep the property of municipal companies in loss with the obligation to "consolidate" them into municipal budgets. However, it currently seems that all these actions are not enough to change the mind of many local administrations. It is not a paradox that the national Government is pushing for one direction and local governments oppose it? (at the expense of possible efficiency improvements and inflows of fresh capital by new and old investors: e.g. Cassa Depositi Prestiti, whose Strategic Fund has made available 600 million euros to acquire shares from the Municipalities and favor aggregations)
- 5) What is the role played by actors such as CDP e F2i (considering their portfolio) in the consolidation of the big multi-utility groups? What is, more in general, their influence in the dynamics of the multi-utility industry?

6) The fragmented panorama characterizing the Italian utility industry is also due to the presence of companies such as Enel, Eni, Italgas, etc. in some business lines that represent the target areas for the expansion and the consolidation of the multi-utilities. Moreover, the companies just mentioned (mainly Italgas) are now particularly active in undertaking acquisitions and in competing in the tenders for the assignment of concessions for the natural gas distribution service. Does this fact add further difficulties in the establishment of the multi-utility model? Is it possible, in the long term, the coexistence of the previously cited companies and the big multi-utility groups?

Focus on Acea S.p.A.

- 7) Acea is one of the four leading Groups in the Italian multi-utility panorama. It is also employing an international expansion strategy, particularly in Latin American territories. Why did Acea choose to go in the direction of "geographical diversification" instead of focusing in the national consolidation for "territorial contiguity"?
- 8) Acea is slowly expanding through the employment of acquisitions targeting small companies. This growth strategy, largely adopted also by other multi-utility groups, is the consequence of the financial position of the companies together with their low flexibility in allowing new investors to join the firm's shareholdings. However, the type of operations that would help most to improve efficiency, to increase size and to solve the problem of the high financial leverage is represented by mergers. Nevertheless, this kind of transactions are currently not taking place. Is this major trend, resulting in the consolidation of the industry around the biggest actors instead of between them –, actually creating value for these companies and for their stakeholders?
- 9) How can we determine the value generated for the final users through this consolidation process? More precisely, through which indicators can we attest respectively:

- The improvement of the services provided?
- The ability to improve and innovate the incorporated assets?
- The reduction of the tariffs relative to the services offered to final users?
- 10) Can the "Acea 2.0" project be judged as the first move in the direction of the new *Smart City* services? Which is the strategic relevance represented by this type of investments compared to those relative to the infrastructures?
- 11) Several analysts have positively assessed the Acea's intention to continue to focus on regulated businesses investments. Others have repeatedly indicated that the overwhelming presence of the Municipality in the shareholding (in Acea as in other companies) strongly restricts the company's investment, expansion and consolidation capabilities, since it does not fundamentally allow fresh capital inflows from new investors (institutional and market). Would not it be a shame not to seize the current opportunities to grow? Furthermore: is there no risk that Acea may remain geographically anchored to the City/Province of Rome?
- 12) In the Italian multi-utility panorama there is a "black hole" represented by the Regions of Southern Italy. The latter areas could represent a further growth opportunity for the entire industry, given the demand for quality utility services that could be met. However, it has been stated that "the intervention in these contexts should be accompanied by a favorable institutional framework and not be entrusted only to the goodwill of individual companies". The four players, anyway, are pretty much all moving in that direction. Considering that Acea is the closest involved for territorial contiguity, isn't this a great opportunity that would allow Acea to consolidate itself as a leader for Central-Southern Italy?

Special Acknowledgments

This M.Sc. Thesis represents, among other things, also the last step of my university career, at least as far as this studies' cycle is concerned. For this reason, I wanted to reserve this "special space" to express my greatest gratitude to the people with which I have spent moments of life, in addition to university's ones, in these last five years that I lived in a rather intense way.

The first thanks can only go to my parents, who have never given up supporting me, and to my sister, with which – albeit at distance – I have continued to grow in these years as only two brothers can do. I want also to thank all the other members of my family, particularly my grandfather Raoul which had often been my source of inspiration and motivation.

I have to thank Lello for being the only true friend (before coach and educator) who kept being such even after I greeted my hometown.

In these last five years, I have been lucky to meet some wonderful persons with which I established friendships I will bring with me forever.

Among these, I want to address special thanks to (in the order I initially met them) Lorenzo, Cristiano and Frank. With them I spent the great majority of time in the last five years and shared unique moments that I will never forget.

Then, I could not avoid to mention the mates with whom I spent my Erasmus in Vienna during my Bachelor, namely Gabriele, Giacomo, Elisabetta, Mariangela and Gianluca. Without them it would have never been such a fantastic experience.

I would also like to thank Francesco, my "adventures mate" during the last year of Double Degree in Gothenburg. Without him everything would have been much more difficult. Moreover, I want to thank the "Phenomenons" and particularly Domenico, Ernesto, Lorenzo, Filippo and Alessio, great friends with whom I spent special moments mainly throughout the last two years.

There are surely many other persons I would like to thank, but, for reasons of time (I'm late, as always...), I just thank them all jointly for the time spent together.

However, I must specifically thank all the persons who have believed in me during these five years, among which I want to mention Annalisa Pacini who, in my second year of Bachelor, entrusted me with the "heavy role" of testimonial for LUISS.

Finally, and she knows why, my immense and truly thanks – although thanks are not enough – go to Olimpia. With her I lived the last two years, and thanks to her I have discovered many things of life previously unknown to me. Her constant presence and support have been providential in allowing me to overcome fatigues and adversities, at university as well as in life, and I can only be happy to share with her also the end of this great journey.