REGULATORY REFORMS AND TRANSACTION COSTS IN CONCESSIONS OF HYDROPOWER PLANTS IN ALBANIA

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DEKLARATA E AUTORËSISË

Deklaroj me përgjegjësinë time të plotë se ky disertacionin i punuar dhe paraqitur prej meje për marrjen e titullit me gradë "Doktor'', është një studim tërësisht original dhe kryer për herë të parë mbi analizën e kostove të transaksionit nga ana empirike në sektorin hidro-energjetik. Është një punim i cili hedh dritë dhe kontribuon në pasurimin e literaturës të Ekonomiksit të Kostove të Transaksionit (TCE), por është edhe një risi në metodologjinë e perdorur.

Florian Miti

ABSTRAKTI

Gjatë viteve të fundit, industria e prodhimit të energjisë elektrike ne Shqipëri ka kaluar disa reforma thelbësore me qëllimin e rritjes së efiçencës në prodhim, promovimin e konkurrencës dhe krijimin e formave të partneritetit publik-privat në sektorin energjetik. Në këtë disertacion kam analizuar ndikimin e kostove të transaksionit të krijuara nga ndërveprimet midis firmave koncesionare të sektorit hidroenergjetik dhe autoritetit publik, duke filluar nga procedurat e shpalljes së ofertës për dhënien dhe ndërtimin e hidrocentraleve të reja deri në fazën përfundimtare të prodhimit të energjisë elektrike. Fokusi është i drejtuar tek firmat që kanë aplikuar në procedurën konkurruese menjëherë pas hyrjes në fuqi të Ligjit nr. 9663, "Për koncesionet", në fund të vitit 2006, dhe që janë aktualisht duke operuar në vend nën një regjim koncesionar për 35 vjet.

Në këtë studim, unë jam përpjekur të gjej nëse firmat konkurruese për marrjen e licencave koncesionare të formës BOT (Build-Operate-Transfer), ndeshen me kosto më të larta transaksioni në krahasim me firmat të cilat kanë konkurruar në ankand për privatizimin e impianteve ekzistuese hidroenergjetike.

Në vitet e para, pas dhënies e të drejtës koncesionare, firmat përballen me shumë vështirësi për shkak të një normative rregullatore të ndërlikuar, të kushteve kontraktuale dhe burokracisë. Edhe pse në shumicën e rasteve, fituesit pajisen nga autoriteti publik me leje koncesionare brenda afateve ligjore, ata dështojnë të fillojë prodhimin e energjisë elektrike brenda afatit të deklaruar. Kostot direkte të transaksionit të llogaritura duke matur kostot aktuale që firmat apo individët përballen gjatë këtyre procedurave mund të jenë relativisht të ulëta, përafërsisht midis 1-2% të kostos së përgjithshme të investimit,ndërkohë që kostoja oportune duke konsideruar humbjen potenciale në të ardhura për shkak të vonesave në prodhimin dhe shitjes së energjisë elektrike, në disa raste, mund të jetë e barabartë me koston totale të ndërtimit impiantit hidroenergjetik. Konceptet teorike dhe matjet empirike bazohen në kontributet e Oliver Williamson, artikujve shkencor të Institutit Roland Coase, studimet e Joskow mbi kontratat afatgjata dhe kështu me radhë.

ABSTRACT

In the recent years the electricity production industry in Albania has experienced various substantial reforms in order to increase efficiency in electricity production, promote competition and introduced forms of private-public partnerships in the energy sector. In this dissertation I analyze the impact of transaction costs emerged from interactions between concessionary hydropower-plant firms and the public authority. The focus is oriented on firms that have applied in the bidding procedure for granting the concessionary license after the introduction of the Law No. 9663, "On Concessions", by the late of 2006 and are now operating in Albania under concession for 35 years.

In this study, I try to find whether firms bidding for HPP concession licenses (Build-Operate-Transfer), encounter higher transactional costs compared to firms which have competed in auctions for privatization of existing hydropower plants.

In the first years, after granting the concession right, firms face many difficulties due to a complex normative regulation, contractual conditions and bureaucracy. Although in the majority of the cases, winning firms are provided from the public authority with the concessionary permit within the legal deadlines, they fail to start producing electricity within the declared timetable. Even though direct transaction costs computed by measuring the actual costs that firms or individuals face during these procedures may be relatively low, fairly 1-2 % of the total cost of investment, opportunity costs considering the potential loss in the revenues due to delays in producing and selling electricity, in some cases, can be equal to the total cost of constructing the implant. Theoretical and empirical concepts are based on the contributions of Oliver Williamson, The Roland Coase's Institute working papers, the studies of Joskow on long term contracts and so on.

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LIST OF ABBREVIATIONS AND GLOSSARY

TCE- Transaction Cost Economics,

METE- Ministry of Economy Trade and Energy,

BOT- Built Operate Transfer

NIE - New Institutional Economics

ERE- The Albanian Energy Regulator Authority

ATRAKO- The Concession Treatment Agency

KESH- Albanian Electro energy Corporation

OST- Transmitting System Operator

INTRODUCTION

The energy sector has a strategic importance for the economic and the social development of a country. In Albania, as in other countries, privatization and regulatory reforms have been introduced in the electricity sector as a solution to the problem of the low performance in services and in lowering energy prices.

The restructuring process of the sector aiming to shift from a vertical integrated structure into a structure with legally, functionally and financially separated organizations, has lead on one hand to the creation of new entities for generation, transmission and distribution activities, and on the other hand aims achieving the harmonization of the domestic energy legislation in accordance with the European Union's Energy Directives.

A very frequent approach adopted in restructuring this sector, is the separation of ownership and control[1]. This approach involves placing the non-competitive component under the control of an independent entity or agency in the quality of the regulator. Some disadvantages resulting from the unbundling process of the vertical integrated entity, is the potential loss of economies of scale and scope earned by the integration and rise of *transaction costs* because contractual agreements replace direct management control (Joskow, 2002).

In Albania, the electricity production from renewable energy sources, in the last years is dominated by the construction of small hydroelectric power plants (HPP). Although

[1] See Fama and Jensen (1983).

during 2007-2013 a considerable number[2] of concession contracts were signed for the construction of small hydropower plants, actually only a small part of them is built. The official statement regarding the slow progress in the hydropower sector is that- *despite the high expectations of new capacity installed, the actual progress has been slow due to several factors, most importantly the lack of funds and the financial condition of wholesale suppliers*[3].

The object of this dissertation is to analyze the impact of transaction costs occurred during the interactions between firms and Public Authority. The focus is oriented on the new hydro power plants firms which have applied in the bidding procedure after the introduction of the Law No. 9663, "On Concessions"[4], in 2006 and are now operating within the Albania territory for a concessionary period of 35 years.

It seems that in the first years after granting the concession right, firms face many difficulties due to a complex normative regulation, contractual conditions, red tape and bureaucracy. In fact, Spiller (2008), on one hand describes the *public contracting*[5] to be characterized by formalized, standardized, bureaucratic, rigid procedures[6] and on the

[2] From 2007 to 2013 were signed a total of 132 concessionary contracts with 384 HPP-s , with a total power of 1.633 MW and a total investment of 2.4 billion Euro. (Source METE, AKBN).

[3] See "*Strategjia Kombëtare për Zhvillim dhe Integrim: 2015-2020*", Council of Ministers, Albanian Government.

[4]The Albanian Parliament, on 25 April 2013, replaced the Law nr. 9663 "On concessions" with the Law no. 125/2013 "*On Concessions and Public-Private Partnership*" making some corrections and further specifications not included in the previous law.

[5] Spiller (2008), refers to public contracting to the case when one of the parties to a transaction is a public entity, such as a governmental agency or company

[6] See Greenstein (1993).

other hand, public contracting generates peculiar types of *hazards*[7] associated with the fact that one of the parties to the contract is the state, or a state institution.

The purpose of this study is to achieve a quantitative impact of the costs arising due to these interactions expressed in percentage terms of the overall investment cost or in days of delay due to administrative procedures up to starting producing electricity.

I test for the *hypothesis* that "firms applying for HPP concession licenses in the form of BOT contracts (Build-Operate-Transfer), encounter higher transactional compared to firms which have competed in the privatization auctions of existing hydropower plants", considering privatization procedures as a benchmark.

This dissertation gives some answers to the following topics:

- The current state of the transaction costs theory and transaction cost regulation,
- Various approaches for measuring transaction costs,
- Assessing the impact of the transaction costs in constructing HPP,
- Empirical contributions in measuring transaction costs,
- Policy recommendations.

The first chapter provide the theoretical underpinning of transaction costs: their nature, typology, use and implications. The second chapter contains a general overview of energy reforms and regulation of the hydropower plant concessions that are already operating in Albania or already have concluded the concessionary negotiation phase and their role for the social and economic development of the country. The third chapter examines the pre-contractual phase on concession's bids necessary for selecting the most efficient operator by the presentation of their technical solutions. During this

[7] In Spiller(2009), the fundamental hazards in government / utility investor interactions arise from two types of opportunism: *governmental* and third-party *opportunism.*

phase, the bidding process and projects evaluation can create many delays to the potential operator and increase transaction costs. The fourth chapter describes the post-contractual phase and contract monitoring which are potentially affected by the moral hazard phenomenon. The auction process, which is a sealed-bid auction based mostly on characteristics like concessionary fees and annual energy production, can be either one stage or contain a prequalification phase. In relation to the monitoring phase, there are presented some statistics regarding concessionary agreements which were penalized during 2011, by the Contracting Authority for various delays and other failures in observing the contractual terms, increasing the costs that these specific firms were facing. Finally, in the fifth chapter, I try to estimate transaction costs in already finished hydropower plants, by interpreting data on total investment costs, energetic capacity, effective period of starting producing electricity and missed revenues because of delays in production.

Among many reasons explaining the delays in implementing the projects, is emphasized the difficulty of getting the construction permit and the current financial crisis of the banking sector that makes banks reluctant to supply large amounts of loans, legal disputes with other firms participating in the bidding process, high regulation, bureaucracy, corruption, intermediaries, expropriation procedures and other factors difficult to be quantified or verified for each case. Final considerations, recommendations and concluding remarks follow.

CHAPTER I: THE TRANSACTION COSTS THEORY

1.1 The rise of Transaction Costs Economics

Transaction costs can be initially identified in Coase's (1937, p. 9) seminal paper as "*the cost involved in the carrying out the transaction in the open market*", while he was looking for the reasons why the firms exist. Coase's argument was a radical departure from neoclassical economics, which had assumed that choices between firm and market and decisions about firm size and production were driven by technology, not transaction costs. In the later works he would state that:

"*Firms will emerge to organize what would otherwise be market transactions whenever their costs were less than the costs of carrying out the transactions through the market. The limit to the size of the firm is set where its costs of organizing a transaction become equal to the cost of carrying it out through the market. This determines what the firm buys, produces, and sells*." (Coase 1990, p. 7)

Since the publication of the Coase's seminal paper, "The nature of the firm" in 1937, Coase's insights about transaction costs were largely neglected, until the early 1970's, when the early ideas about transaction costs, property rights and contracts were already developing into the core concepts of what Oliver Williamson later named New Institutional Economics (Williamson, 1975, chap.1).

Starting from the original thought of Coase, the contribution of Williamson to Transaction Costs Economics (TCE) constitute the basic brick to transaction cost literature. Basically transaction cost economics focuses on the ongoing contractual relations (Williamson, 2007).

Williamson gives an unambiguous notion for the transaction costs, being them determined by the uncertainty, frequency, specificity, limited rationality and opportunistic behavior of the agents[8]. Williamson (1971, pp. 114), notes the role that asset specific investments (sunk costs) can play in causing contractual disagreements and thus the need to vertically integrate. According to Williamson (1981, p. 552), "*Transaction cost analysis concerns about the comparative costs of planning, adapting, and monitoring task completion under alternative governance structures*".

A more recent formulation of the transaction costs can be adopted by the definition used by Furubotn and Richter (1997, p. 40) where "transaction costs include the costs of resources utilized for the creation, maintenance, use, change, and so on of institutions and organizations" while in the case of the existence of property and contract rights, the authors include in the transaction costs "the costs of defining and measuring resources or claims, plus the costs of utilizing and enforcing the rights specified".

While Coase provides a link between transaction costs and property rights through "the Coase Theorem" stating that: "in the absence of transaction costs, the allocation of resources is independent of the distribution of property rights", Furubotn and Richter, in a situation of transferring the existing property rights and in establishing or transferring contract rights between individuals, include in the transaction costs - the costs of information, negotiation, and enforcement.

In principle, we could identify three channels while analyzing the transaction costs:

i) *The cost of participating in the market;*

ii) *Internal managing costs of corporate governance;*

iii) *The cost of interaction with Public Institutions*.

[88]See Williamson (1979), and (1985).

1.1.1 The cost of participating in the market

These costs are originally discussed in the seminal paper of Coase (1937), where the "price mechanism" plays a role in the firm decisions to make or buy: "The costs of negotiating and concluding a separate contact for each exchange transaction which takes place on a market must also be taken into account" (Coase, 1937, p. 390), implying that the firm becomes larger as additional transaction (which could be, according to the author exchange transaction coordinated by the price mechanism) are organized by the entrepreneur and became smaller when he abandons such transactions.

Examples of the costs the firm faces while interacting with external agents in the market are the following typologies:

- The costs of placing the goods produced on the market (including here activities of advertising, marketing and customer contacts);
- The cost of finding an appropriate provider in terms of price and quality;
- The cost of contract negotiation and contract formulation with customers and suppliers;
- The costs of hiring professional assistance;
- Market study research;
- The costs of contract enforcement or legal disputes with other organizations, and so on.

These costs are affected by the limited rationality of the economic agents, asymmetric information, post-contractual opportunism and asset specificity. The presence of these elements increases the transaction costs as part of the total costs leading to inefficiencies and contractual frictions.

Klein (1980), deals with the "hold – up" problem by explaining the reasons why contracts are incomplete:

"*First, uncertainty implies the existence of a large number of possible contingencies and it may be very costly to know and specify in advance responses to all of these possibilities. Second, particular contractual performance, such as the level of energy an employee devotes to a complex task, may be very costly to measure*" (p. 356).

Therefore, Klein explains that given the presence of incomplete contractual arrangements, wealth-maximizing transactors have the ability and often the incentive to renege on the transaction by holding up the other party, in the sense of taking advantage of unspecified or unenforceable elements of the contractual relationship. This phenomenon is identified and discussed by Oliver Williamson as "opportunistic behavior", while Klein *et –al* (1978)[9] have earlier attempted to make operational some of the conditions under which this hold-up potential is likely to be large. In addition to contract costs, and therefore the incompleteness of the explicit contract, the authors emphasize the presence of appropriable quasi rents due to highly firm-specific investments. The author points out that after a firm invests in an asset with a low-salvage value and a quasi-rent stream highly dependent upon some other asset, the owner of the other asset has the potential to hold up by appropriating the quasi-rent stream, giving the example that one would not build a house on land rented for a short term. The solution emphasized by the authors is vertical integration, that is, one party owning both assets (the house and the land). However, the authors point out that this solution will not necessarily be observed. This is because of the fact that the size of the

[9]Klein, Benjamin, Robert G. Crawford, and Armen A. Alchian (1978), 'Vertical integration, appropriable rents, and the competitive contracting process', Journal of Law and Economics, 21 (2), 297–326.

hold-up potential is a multiplicative function of two factors: the presence of specific capital, that is, appropriable quasi rents, and the cost of contractually specifying and enforcing delivery of the service in question -the incentive for contract violation and the ease of contract violation.

> "*Even where there is a large amount of highly specific capital, the performance in question may be cheaply specifiable and measureable and a complete contract legally enforceable at low cost. Therefore, while a short-term rental contract is not feasible, a possible solution may be a long-term lease. In addition, since the cases we will be considering deal with human capital, vertical integration in the sense of outright ownership is not possible*" (Klein 1980, p. 357).

In a perfect world where there is no economic friction there would in theory be zero transaction costs and there would not be any need for the organization of the economic activities within the firms and economic exchange would occur spontaneously.

However, the existence of the firm as an economic organization raises the issue of the firm coordination that involves also internal costs. In the end, it would result in presenting the next typology of transaction costs.

1.1.2 Internal managing costs of corporate governance.

For Coase (1937), the size of the firm is determined by internal balance between the costs of coordinating the product in the market[10] (the author considers the marketing costs, that is, the cost of using the price mechanism) and the costs of organizing the production within the firm (managing costs), presenting this issue as a matter of make or buy decision.

This typology of costs is better emphasized in the context of the modern corporation, characterized by the separation of the ownership and control because, except in the case of the owner-manager, all enterprise structures are subject to some forms of principal-agent problem[11]. Relaxing the assumption that top managers (agent) act in the best interest of the shareholders (principal), agents will try to maximize their own wealth and therefore pursue their own personal objectives and often at principal expenses.

Jensen & Meckling (1976), argue that because of this type of incompatibility in the objectives, potentially profitable investments are simply forgone. The authors refer to this phenomenon as *the residual loss from agency*. Since it is costly for the principal to monitor the activity of the agent, the sum of monitoring costs by the shareholder, bonding costs by managers and residual costs are known as the agency costs outside the equity ownership (Johnsen 1993, p. 12). Here the transaction costs are related to management and coordination of the multiplicity of contracts that regulate the activity inside the firm. These costs typically are embodied in activities of human resources, in the cost of monitoring, the costs of information and coordination, accounting activities and so on. The presence of these internal costs implicitly provide a logic supporting why the firm cannot grow without any limit, that is, why the economy is not managed

[10] Transaction costs

[11] See Jensen M. C. & Meckling W. H. (1976) and Fama E. F. & Jensen M. C. (1983).

by only one huge firm. "In general, a firm will expand to the point where the marginal benefit in the form of reduced transaction costs is just offset by the marginal cost of internal organization" (Bulter, 1989, pp. 104).

On the other hand, the *Property rights*[12] approach considers transaction costs as *the costs of establishing and maintaining property rights*[13] since, according to this approach, trade is the transfer of the property rights so that there can be no trade in absence of property rights (Allen, 1999-2000 pp. 898).

The contribution of Alchian and Demsetz (1972) to the modern theory of the firm, introduce another approach regarding the form of the firm's organization. According to the authors, the emergence of the firm is a response to the benefits of the team production. From this point of view, the terms of the contracts create the basis for the firm to exist. The organization of the firm is so characterized by the activity of *monitoring and control* that the *manager* exercises regarding to the team production activity where phenomena like "free riding" [14]and " shirking" [15]can disincentive the parts in case of non adequate remuneration.

[12]Property Rights: the ability to freely exercise a choice over a good or service. (Allen W. D. 2000, pp. 898)

[13] Allen (1991).

[14] In Baumol,(1952), the free rider problem occurs when those who benefit from resources, goods, or services do not pay for them, which results in an under-provision of those goods or services

[15] The act of working less when there is no chance of earning a higher return.

1.1.3 The cost of interaction with Public Institutions

This typology of transaction costs are the costs that the firm has to bear in order to fulfill the institutional obligations. This research attempts to analyze the case of firms operating in a concessionary regime and regulated activities, proving the impact of these costs during the investment process and on the decision-making of the entrepreneur.

Examples of the costs entering in this typology are:

- the administrative costs of establishing a new firm,
- fees and charges for obtaining licenses and permits for the implementation of a new project,
- costs in participating in auctions and bids,
- costs of fulfilling the tax obligations and of social contributions,
- costs arising from the Public Institution's Regulation,
- enforcement costs and other costs incurred from contractual divergences and so on.

This particular case of transaction costs arising due to the interaction with the Public Institutions influences dramatically the phenomena of *corruption* inside the social system.

Even though the aim of this case study is not to deal with this phenomenon, the role of corruption (sometimes perhaps crucial for the success of a new investment) cannot be neglected to this analysis.

Furubotn and Richter (2005, p. 69) emphasize the role of poor legislation as an example of inefficiency in governmental activity. Even though two economic systems or countries may have the same level of technological knowledge, their governments may not be equally efficient which will result in different net production functions. Countries with the more efficient government will enjoy greater net output at any respective level of input. The transaction costs in this case may be political transaction costs, the costs of setting up, maintaining, and changing the formal and informal political organization of a system, as well as the costs of running the institution.

Fredriksson (2014), in his paper assessing the role of intermediaries in the net gain of individuals and firms obtaining the license through intermediaries, show the incentives of corrupt bureaucrats to complicate licensing procedures and to create more red tape. The model takes in consideration the fact that in most developing countries, individuals and firms spend unusually considerable amount of time for getting a license and thus, their research is focused on what intermediaries offer to firms: *time saving*. The authors show that when the intermediary sector is endogenous in the model, and assuming an entry of oligopolistic competition between intermediaries, as long as entry costs are considerably low and bureaucrats can choose the optimal level of red tape, licensing procedures are longer and individuals are worse off than without the intermediary sector.

Normally, the presence of corruption increases the costs of making a transaction, so that in total, it brings about further inefficiencies in the system and further biases the wealth distribution (Clerico *et al*, 2007).

Since the corruption becomes more fertile in an environment of complex norms and regulation rules, this phenomenon could be more persistent in the cases where the

interpretation of the norms is not clearly specified and there is some discretion in the decision making of the regulator.

1.2 The New Institutional Economics[16]

Transaction Costs Economics – TCE, can be considered as a part of what is called the New Institutional Economics –NIE, a term introduced by Williamson (1975) related to the study of institutions.

Klein (2000, p. 456) describes the NIE as:

> "*an interdisciplinary enterprise combining economics, law, organization theory, political science, sociology and anthropology to understand the institutions of social, political and commercial life. It borrows liberally from various social-science disciplines, but its primary language is economics. Its goal is to explain what institutions are, how they arise, what purposes they serve, how they change and how – if at all – they should be reformed*."

Institutional economics covers two areas of study:

- One focuses on property rights and the role of firms and other organizations in reducing transaction costs, following the original work of Ronald Coase and the later contributions of Oliver Williamson.
- The other area, developed by the work of Douglass North (1990), emphasizes the role of the state and its institutions in creating order and controlling violence, expropriate property and exploit individuals.

Institutional economics, like neoclassical economics, gives credit to the importance of resource scarcity, markets, and competition, but also it assumes that individuals have imperfect information and bounded rationality and face uncertainties and risks in their transactions with one another.

[16]Part of this section is based on the NIE explanation of A. Benham *et al*, "*Institutional Economics: A Crucial Tool for Understanding Economic Development*" Ekonomický časopis, 57, 2009, č. 6, s. 603 – 607.

To reduce their risks and costs, individuals set rules, contracts, and norms to constrain behavior and make transactions more predictable. These mechanisms significantly affect the market's performance. In contrast with the neoclassical view which assumes that market performance largely depends on resource endowment, macroeconomic policy, and technological change, institutional economics argues that the incentives and transaction costs created by institutions largely affect the way how resources are used, which policies are chosen, and if technological innovations are utilized.

Klein (2010) presents another distinction of the NIE by considering the fact that policy analysis is guided by what has become known as 'comparative institutional analysis".

In the welfare analysis, real- world outcomes are usually compared with a hypothetical benchmark of perfectly competitive general equilibrium, resulting with unsurprising dissimilar market outcomes. Coase (1964, p. 195) explains how a better and feasible alternative can be devised:

> "*Contemplation of an optimal system may provide techniques of analysis that would otherwise have been missed and, in certain special cases, it may go far to providing a solution. But in general its influence has been pernicious. It has directed economists' attention away from the main question, which is how alternative arrangements will actually work in practice. It has led economists to derive conclusions for economic policy from a study of an abstract of a market situation. It is no accident that in the literature . . . we find a category 'market failure' but no category 'government failure'. Until we realise that we are choosing between social arrangements which are all more or less failures, we are not likely to make much headway*." Coase (1964, p. 195)

Although institutions are presented as fundamental economic drivers, they are still not well understood and more research is needed to understand how institutions function in specific societies, and how deviations from rational behavior affect performance. At this point, it seems that with a better understanding of institutions we

can try to answer to the question that why some countries are rich and some other countries are poor.

Institutional economics can provide some fundamental insights regarding to this question. Benham et al (2009) point out one important insight that is, countries in order to develop and progress need institutions that encourage and support low transaction costs, - *where such institutions are absent, transaction costs are much higher and sometimes so high to create market failures*, as stated by Coase in The Institutional Structure of Production (AER, 1992): "*If the costs of making an exchange are greater than the gains which that exchange will bring, that exchange will not take place*."

Furubotn and Richter (2005, p. 43), define *the political transaction costs* as the "costs of running and adjusting of the institutional framework of the organization." These are the costs of sustaining the formal and informal political organization of a system, that is, the costs of running the state machine. In contrast to them, there are market transaction costs, the costs of search and information, bargaining and enforcement using the market. Hence, the authors point out that when political transaction costs are lower than the costs of using the market, then centralized control and decision making under the state becomes preferable to market coordination.

Todorova (2011 and 2014) while analyzing the transformation of post-communist economies from state owned to private property, brings some interesting facts of market failures generated from the private property. The author shows that from the perspective of transaction costs economies, markets are sometimes costly to use, especially in the new emerging market economies of transition countries.

Todorova argues that there exist significant differences between Western economies in which markets function smoothly and therefore transaction costs tend to be low and Eastern European societies where the economic transition period has proven failures of the markets in allocating economic resources. According to the author, Eastern European firms, facing considerable institutional impediments and high transaction costs of using the market, achieve lower profit levels and produce a lower net aggregate output. Recalling Coase (1960) in the "Problem of Social Cost", emphasizing the role of the judges and courts play in the economic system acting as a resource allocating mechanism by deciding in favor of one firm or another:

> *"The situation is quite different when market transactions are so costly as to make it difficult to change the arrangement of rights established by the law. In such cases, courts directly influence economic activity. It would therefore seem desirable that the courts should understand the economic consequences of their decisions and should, insofar as this is possible without creating too much uncertainty about the legal position itself, take these consequences into account when making their decision." (Coase, 1960, p. 19)*

Courts should be aware of the economic consequences of their decisions and should act in order to maximize the total economic output. Glaeser, Johnson, and Shleifer (2001, p. 854) in "Coase versus the Coasians" find that in many emerging markets, courts are under-financed, unmotivated, unclear on the applications of law, unfamiliar with economic issues, and even corrupt. The authors conclude that enforcement by regulators can be more successful than judicial procedures. Thus, direct regulation may turn out to be more efficient than the court system, where judges lack incentives to enforce property rights.

Todorova on the other side, reviewing the transition process of many economies in Eastern Europe, concludes that it requires direct, rather than indirect, government participation in spheres and activities facing considerable transaction costs.

At this point, it is clear that well-functioning markets depend necessarily on efficient institutions that would keep low transaction costs. These include informal codes of behavior, trust, reputation, as well as formal laws, codes, and contracts enforced by the state, where the state plays a critical a role, but it can be also problematic as pointed out by Douglass North stating that, while a market is voluntary, a market needs a state powerful enough to enforce the rules[17]. But any powerful state faces some critical decisions: to make or to take? To support production or to expropriate its returns? Today many democratic countries have adopted constitutions and formed independent institutions to guarantee civil rights and freedom but institutions need to be credible in order to attract new investors. North (1990), specifies five propositions about institutional change:

"1. In the economic setting of scarcity, the competition is the key to institutional change. 2. Competition forces organizations to continually invest in skills and knowledge to survive. 3. The institutional framework provides the incentives that dictate the kinds of skills and knowledge perceived to have the maximum pay-off. 4. Perceptions are derived from the mental constructs of the players. 5. The economies of scope, complementarities, and network externalities of an institutional matrix make institutional change overwhelmingly incremental and path dependent."

The interactions between governments and private investors in providing utility services are the focus of another author Spiller (1996a, 2008, 2011), while dealing with *Transaction Cost Regulation* (TCE). Spiller makes the analogy with the standard

[17] For further analysis see Brennan, G. and James Buchanan. 1985. The Reason of Rules. Cambridge: Cambridge University Press and Buchanan (1987), "The Constitution of Economic Policy". *American Economic Review* 77: 243–250.

transaction cost economics, where as emphasized by Williamson (e.g. 1979), the nature of contracting hazards determines the fundamental features of the interactions' governance, in the same way,- regulation, and regulatory contracts (which are the forms that the governance of such interactions take), are then to be understood as a result of hazards inherent to these interactions (Spiller, 2011).

Spiller in emphasizing regulation as the governance structure of public / private interactions, separates transaction cost regulation from other approaches to regulation. In particular, the author explains that since contractual hazards requires assessing real people behavior, in real environments and within real institutions, as a consequence, transaction cost regulation rejects the notion of "optimal" regulation (Spiller, 2011).

As emphasized initially by Coase (1964) and afterward by Williamson (1979), the analysis of regulation should be done within the proper institutional comparison, and with a heavy micro-analytic dose. The following section presents different approaches of estimating empirically various forms of transaction costs in different sectors and in different institutional environments.

1.3 Empirical Analysis and Estimation of Transaction Costs

A considerable contribution in the empirical analysis of the theory of TCE, is introduced by the survey of Shelanski and Klein (1995). The authors, based on the Williamson's (1983) distinction between four different types of asset specificity[18], try to find empirically the most efficient organization structure taking into consideration the "make or buy" decision and the structure of long term contracts, within a given institutional framework[19].

In the case of vertical integrated firms, the authors find that asset specificity and uncertainty have significant effect on the structure of production. When full integration does not worth the costs, "hybrid" forms of governance are adopted. These can have the form of long-term contracts, complex contracts with reciprocity agreements, exclusive dealing contracts, agreements to provide offsetting specific investment and so on (1995, p.345).

In the case of long-term contracts, the authors investigate on the case studies of Joskow (1985, 1987, 1988b and 1990); Crocker and Masten (1988); Goldberg and Ericson (1987); De Canio and Frech (1993); Pirrong (1993). A key feature of long term contracts is their *incompleteness* since they are considering complex contracts. The authors find significant results such as: the contracts are observed to be more complete when the contractor has a history of disputes with purchasers and less complete when

18 Williamson (1983), distinguishes between four types of asset specificity: Site specificity; physical asset specificity; human asset specificity; and dedicated assets.

19Shelanski (1995, pp. 341),considers five major categories of empirical phenomena explained by TCE: vertical integration, "hybrid" contracting modes, long-term commercial contracts, informal agreements, and franchise contracting.

there is a high degree of intertemporal or technological uncertainty. The authors also suggest that the degree of contractual completeness may reasonably be treated as an endogenous variable. In the case of informal agreements, although none of the cases taken as a study were legally enforceable, the reputation effects and the reciprocity provisions provide significant guaranties for the parties involved. The empirical studies involved in this section (Palay 1984 and 1985, Wilson 1980, Acheson 1985, Brinig 1990), support transaction cost reasoning because not only they find that observed arrangements can be explained in terms of asset specificity and uncertainty, but also because they reflect an emphasis on private ordering over the court's role (Shelanski and Klein, 1995, p. 349). The case of franchise contracting is better explained by the case study of Williamson (1976), presented in the following pages.

The empirical studies of Joskow (1985 and 1987) on the coal industry, provide a strong support of the hypothesis that "*as relationship-specific investment becomes more important, the parties will find it advantageous to rely on longer - term contracts that specify the terms and conditions of repeated transactions ex ante, rather than relying on repeated bargaining*." (1985, pp. 183). The author argues (1985 and 1987) that both the duration of coal contracts and the decision to internalize coal production through vertical integration are heavily influenced by the importance of relationship specific – investment of the types described by Williamson (1983). The author suggests that long-term contracting can be a feasible alternative to integration when asset specificity is moderate. Furthermore he finds out price adjustment mechanism are typically relied upon in long –term coal contracts that showed to be successful during the '70-ies and '80-ties shocks where price flexibility was necessary in response to change of production costs. In Joskow (1987), the author's hypothesis is that-"the more important

are relationship-specific investments, the longer will be the period of time over which the parties will establish the terms of trade *ex ante* by contract". Getting information from approximately 300 coal-supply contracts, the author estimates simple relationships between duration of contractual commitments and annual quantity of coal contracted and other dummy variables, specifying the following models:

(1) $DURATIONi = a_0 + b_1QUANTITY_i + b2QUANTITYi^2 + b_3MINE\text{-}MOUTH_i + b_4MIDWEST_i + b_5WESTi + u_i$

(2) $DURATIONi = a_0 + b_1LOG\text{-}QUANTITY_i + b2QUANTITYi^2 + b_3MINE\text{-}MOUTH_i + b_4MIDWEST_i + b_5WESTi + u_i$

(3) $Log(DURATIONi) = a_0 + b_1LOG\text{-}QUANTITY_i + b2QUANTITYi^2 + b_3MINE\text{-}MOUTH_i + b_4MIDWEST_i + b_5WESTi + log(u_i)$

Where the dependent variable "DURATION" is the duration of contractual commitments specified by the parties at the execution stage, "QUANTITY" is the annual quantity of coal contracted, "MINE-MOUTH" is a dummy variable that takes a value of 1 for a mine-mouth plant and zero otherwise, and "MIDWEST" and "WEST" are dummy variables that indicate the coal supply region in which the supplier is located, *i* indexes the contracts and *ui* is the error term.

Finding strong support of his hypothesis that as relation-specific investments become more important, the parties will find it more advantageous to rely on longer-term contracts that specify the terms and conditions ex-ante, rather than relying on repeated bargaining.

Crocker and Reynolds (1993), examine the incentives for the parties to design contracts that are left intentionally incomplete. More complete contracts reduce *ex post*

opportunism and the distortions of the unobserved investment, but it needs more costs and effort for the *ex ante* design. The authors try to find the optimal degree of contractual incompleteness in the light of this trade-off. The model presents satisfactory results which are conform to the prediction of the theory of TCE. In fact, the agreements result to be more complete in those cases in which the parts have had some contentiousness in the past and are more incomplete in case of a higher degree of uncertainty. The authors use the following empirical relationship to describe the choice of contractual completeness as a function of the variables that shift the benefit and cost schedules as:

$$Y_{it} = \alpha_i + \beta\omega_{it} + \gamma L_{it} + \varepsilon_{it},$$

Where, - as the authors specify on page 138, -*Yit* is the degree of contractual completeness specified in the contract signed with contractor *i* in date *t*, α_i is a contractor-specific effect, ω_{it} are variables affecting the marginal cost of contractual completeness when contracting with *i* at time *t*, and *Lit*, represents variables that increase the likelihood, as seen from the time of contractual signing *t*, that contractor *i* would engage in future redistributive activities. Requiring ε_{it} to be independent and identically distributed error terms with zero mean and constant variance, and that COV (ε_{jt}, $\varepsilon_{kt'}$) = 0 for every t≠t', j≠k.

As mentioned above, a final characteristic of the contractual record found by Crocker and Reynolds is that agreements tend to become more complete over time, presenting this monotonic relationship as a consequence of the natural resolution of technological and intertemporal uncertainties as events unfold, which appears to be the driving force

behind the design of the engine procurement contracts. Their results also have several implications for procurement policy more generally:

- The first concerns the emphasis by policymakers in the mid-1980s on firm-fixed pricing in development contracts to constrain seller opportunism and to contain cost overruns. While more complete contracts certainly suffice to mitigate ex post redistributive efforts by contractors, Crocker and Reynold's analysis indicates that such benefits may be dwarfed by the costs of drafting truly complete agreements, particularly in complex exchange environments.

-A second point, specified by the authors, is that procurement officers should be granted the latitude to craft agreements on a case-by-case basis, where the design of a particular contract would depend on the specifics of both the product and the contractors. "*Any policy attempting to impose homogeneity in contract design either across contractors or over time would be misguided, and likely to significantly raise the costs of effecting contractual exchange*" (Crocker and Reynolds 1993, p. 145).

In Williamson (1976), the concern centers on the efficacy of the franchising bidding schemes as an alternative to regulation in the provision in public utility services. While looking for alternatives of supplying natural monopoly services, Williamson takes into consideration the fact that there are no friction free alternatives, but nevertheless, a choice among alternatives needs to be made. Among the relevant factors considered in evaluating alternative modes of organizing natural monopoly, he presents the followings:

"*(I) the costs of ascertaining and aggregating consumer preferences through direct solicitation; (2) the efficacy of scalar bidding; (3) the degree to which technology is*

well developed; (4) demand uncertainty; (5) the degree to which incumbent suppliers acquire idiosyncratic skills; (6) the extent to which specialized, long-lived equipment is involved; and (7) the susceptibility of the political process to opportunistic representations and the differential proclivity, among modes, to make them" (p. 75).

The author points out the fact that, the more confidence one has in contracting and in the efficacy of competition, the more one tends to favor market modes. This leads to the conclusion that, "regulation[20], in some form, is relatively favored when one is dubious that incomplete contracting will yield desired results and when competitive processes are prone to breakdown" (p.75).

His assessment for the supply of CATV in Oakland[21], confirms the theoretical idea that when a contract is signed and there are specific investments, the competitor who already has an agreement, is in a more advantageous condition. In fact, the winner firm of the bid for covering the cable television supply, incurred in effectively higher costs and did have the contract renegotiation with better initial conditions since re-making the bidding procedure and choosing another firm, would have been more costly.

Walker and Weber (1984), in their study apply the transaction cost framework to the "make-or-buy" decisions for manufacturing components in a large automobile company in the US. Taking into account that make-or-buy decisions determine the firms level of integration, deciding which specific operation will take place in the firm and which will be contracted to a supplier, the authors focus on the simple choice between making a

[20] As the author explains, regulation, may be described contractually *"as a highly incomplete form of long-term contracting in which (1) the regulate is assured an overall fair rate of return, in exchange for which (2) adaptations to changing circumstances are successively introduced without the costly haggling that attends such changes when parties to the contract enjoy greater autonomy*" . (1976, p.90)

[21] The franchising of cable TV by the city of Oakland.

component within the firm or buying the component in a relatively competitive market. Their research relies mostly on Williamson's (1981) model of efficient firm's boundaries. They consider the influence of transaction costs to the make-or-buy decision by using as proxies the effects on the suppliers market competition and two types of uncertainty: volume and technological, influencing the separately on the model. Their results however show that comparative production costs are the main drivers of make-or-buy decision while the direct effect of competition and buyer's experience (used as proxies for transaction costs due to variation of asset specificity) were relatively small and that between two types of uncertainty, only volume uncertainty had a significant effect.

The empirical studies presented above, give the idea of how the literature on transaction costs is made of various aspects and on various methodologies used to asses them.

-Estimation of the Transaction Costs.

This section presents various methods used for estimating transaction costs and in this case either, the methodologies used are highly heterogeneous.

An interesting case to present here is the situation when transaction costs do not pass through the market. *Non-market transaction costs* (Wallis and North 1986), such as resources spent in waiting, in getting permissions to start a business, paying for bribes and so on, are mostly present in developing and in transition economies.

The pioneering study of De Soto (1989)[22], offers a path of reform for Peruvian society and for other developing countries that operates outside government laws and regulations. In fact "*The Other Path"* is a result of the studies pioneered by the "Instituto de Libertad y Democracia" (ILD) of which De Soto is president. His research stretches towards a phenomenon named as "the informal sector" which is opposed to the formal sector and its activities are conducted outside the legal framework and thus non subject to government regulation. De Soto documents the huge costs of establishing a new business and operate legally in Peru - i.e., the cost of meeting legal requirements for starting and running a business, and the cost of doing business informally in Peru. According to De Soto, high transaction costs of establishing a business, influence its organization structure and in some cases can either determine the availability of a specific product in the market.

"The Other Path" describes the Peruvian informal economy, how it operates, and an analysis of regulatory reform proposed by De Soto. De Soto proposes that current

[22]In Marquez M. (1990), "The Other Path by Hernando De Soto".

regulations regarding transportation, housing, and trade should be removed in order to open space to capitalism and free market activities, and thus creating a path of market-oriented reforms.

De Soto explains that the legislation affects directly the efficiency of the economic activities it regulates. According to De Soto, "a law is 'good' if it guarantees and promotes economic efficiency and 'bad' if it impedes or disrupts it. The unnecessary costs of formality derive fundamentally from a bad law; the costs of informality result from the absence of a good law."[23]

De Soto measures the effect of the law on the informal sector by starting up small businesses by meeting legal conditions. Any time his team started a new business, they got stuck by the government bureaucracy and were forced to pay bribes in order to continue in their process of establishing the new firm. This was why the poor people in Peru find it possible only by working within the informal sector and implementing their skills immediately. According to De Soto, these people "*have chosen to operate outside these bad laws, which entail such high costs and such complex regulations*. "[24]

In their papers, Benham and Benham (1998 and 2001), define the cost of exchange (between different individuals and countries), as the opportunity cost faced by an individual to obtain a specified good using a given form of exchange within a given institutional setting. Specifically, the authors, define the *"cost of exchange* C_{ijkm} *as the opportunity cost in total resources—money, time, and goods—for an individual with characteristics i, to obtain a good j, using a given form of exchange k, in institutional*

[23] H. De Soto at "The Other Path" page 132
[24] H. De Soto at "The Other Path" page 182

setting m[25]*"*. Therefore, the costs of exchange include both, the costs of production and transaction costs incurred by the individual in obtaining the good.

The authors point out that the costs of exchange vary across individuals, groups, and countries since they are affected by factors like: tariffs, taxes, price controls, monopoly, price discrimination, information asymmetries, asset specificity, strategic behavior, and opportunism. Moreover, tariffs, taxes, and price controls require regulations, monitoring, and a bureaucratic process which themselves can alter transaction costs.

In order to examine these costs empirically, the authors have standardized a methodology that specifies particular transactions in terms of the characteristics of the individual, the good to be obtained, the form of exchange, and the setting. The approach is to select and specify some transactions in detail so that researchers can measure the *time and money costs* incurred when the transaction takes place. Individuals with designated characteristics (and by group or country) can then be interviewed concerning the fulltime and money costs they have actually incurred in engaging in the transaction. These serve as *proxies* for the costs of exchange.

The authors show same examples where the variation in money price is likely to be much smaller than the variation in the costs of exchange.

Let's consider the following examples:

In the early 1990s, the authors investigated the cost of obtaining a business telephone in several countries. The actual price to obtain a telephone installed within two weeks ranged from $130 in Malaysia to $6,000 in Argentina. In Egypt in l996, the official published price for a telephone was $295 and the official published "urgent response" price was$885. To proxy for the opportunity cost, the authors compared the purchase

[25]The form of exchange, like in De Soto, is can happen in both, formal or informal market.

prices for similar Cairo apartments with and without a telephone already installed. This difference, which reflects the expected spot market price for a telephone for someone not well connected in this market, was approximately $1,180 to $1,770.

Another example is obtaining legal permission to open a new business. Hernando de Soto provides a simulation approach in his book. In Lima, Peru, in 1983 it took 289 days of full-time work by a team of researchers to go through all the legal steps to obtain all the permits necessary to open a small textile firm, without paying bribes or using political connections. Obviously, people without political connections mainly remained in the informal sector, not legally registered. De Soto repeated the same simulation in Tampa, Florida; it took only two hours to obtain a permit to open a small business. Thus in Peru the time cost was over 1000times as high as in Florida[26].

A group of researchers of the University of Piemonte[27], present an empirical survey in order to provide some measures on the impact that transaction costs have on the productive reality of Piemonte's firms.

The system selected to quantitatively analyze the transaction costs was to present to a small group of companies in Piemonte, a detailed questionnaire in order to verify their operation. The questionnaire has a structure of two parts: the first part has explicative variables i.e. general information on the dimension, legal structure, innovation and so on; the second part is related to transaction costs presented as the sum of internal costs, costs of the market use and the costs with Public Institution interaction. The outcome of

[26]Quoted in Benham& Benham 2001, p.6.

[27]Angela Ambrosino, Giuseppe Clerico, Marco Novarese and Salvatore Rizzello: I Costi di transazione (2004). Istituto Ricerche Economico Sociali (IRES) del Piemonte.

this survey is that the authors find out a low percentage of internal costs (around 2% of annual revenues), the use of market costs have a minor impact (0.23%) and the remaining group of transaction costs related mostly to regulation compliances is still around 2% of the annual revenues but result more burdensome for the small businesses, which have to make use of outsider professionals for mandatory certifications or for commissioning safety systems and also have to devote higher time to carry out bureaucratic issues.

In his discussion paper, Goel (2008), uses recent data on a large cross-section of countries to study the determinants of corrupt activity in order to examine the effect of different types of government regulations on corrupt activities. Specifically, using a large cross-section of about 150 countries, the author examines the effects of different types of regulatory bottlenecks and the associated transactions costs on the incidence of corruption. Greater regulation is generally believed to increase corruption[28]. In this regard, four key sets of regulations are identified:

(i) regulations associated with starting a business;

(ii) regulations related to obtaining government licenses;

(iii) regulatory obligations for registering property;

(iv) regulations surrounding (business) taxation.

For each category, the author considers three types of country-specific bottlenecks: *number of regulatory procedures involved, average time involved in completing a procedure, and the costs of each procedure*.

The findings are straight forward: greater economic prosperity and democracy consistently lowers corruption; a greater number of regulatory procedures lead to more

[28] Johnson et al. (1998), in Goel (2008) .

corruption; due to the implicit costs involved, a longer average duration of each procedure also contributes positively to corruption; finally and what is more important to my analysis, the authors find that higher regulatory transactions costs do not seem to significantly impact corruption, which suggests measurement issues or the possibility that bribe givers are somehow able to circumvent this stage (p.13).

David and Han (2004), provide a systematic assessment of empirical evidence of Transaction Costs Economics. Selecting 308 statistical tests from 63 articles, they assess not only the level of empirical support for the theory, but also the consistency in both measurement and findings in these papers. Some of their findings are as following:

- While Shelanski and Klein (1995: 335) concluded that the empirical literature is 'remarkably consistent' with the predictions of TCE, David and Han found overall support to be at 47 percent.

- Second, David and Han found that there was a significant variation in support for the theory's predictions. As an independent variable, asset specificity fared best[29]. This logic is quite successful at predicting the make-vs.-buy choice (58%), and was even better at predicting the degree of integration between independent buyers and sellers (79%).

- On the other hand, according to the authors findings, results regarding uncertainty are less convincing: "*there does not seem to be a clear relationship between uncertainty and either the choice of governance form or the level of transaction costs (support for these relationships was well below 50% in all cases*)" (David and Han, 2004, pp. 52).

[29]The relationship proposed by the transaction cost logic, in fact , receives the greatest level of empirical confirmation: like in Williamson's (1999), asset specificity is associated with an increased likelihood of vertical integration.

The studies presented above provide useful examples of the link between transaction costs and governmental requirements to meet in order to legally operate within a regulatory framework of different countries. Thus, the supposed inefficiency of regulatory contracts, and of regulatory outcomes, must be assessed in reference to all relevant alternatives (Williamson 1996).

The cost of starting a business represents an important indicator and provides information about the practices and tariffs imposed by the government. The next chapter presents a general overview of the hydro power plant concessions and the relative regulation in Albania since are the main focus while studying transaction cost in this dissertation.

CHAPTER II: REGULATORY REFORMS AND HHPs CONCESSIONS IN ALBANIA

2.1 Regulation and Reforms in the Albanian Electricity Sector.

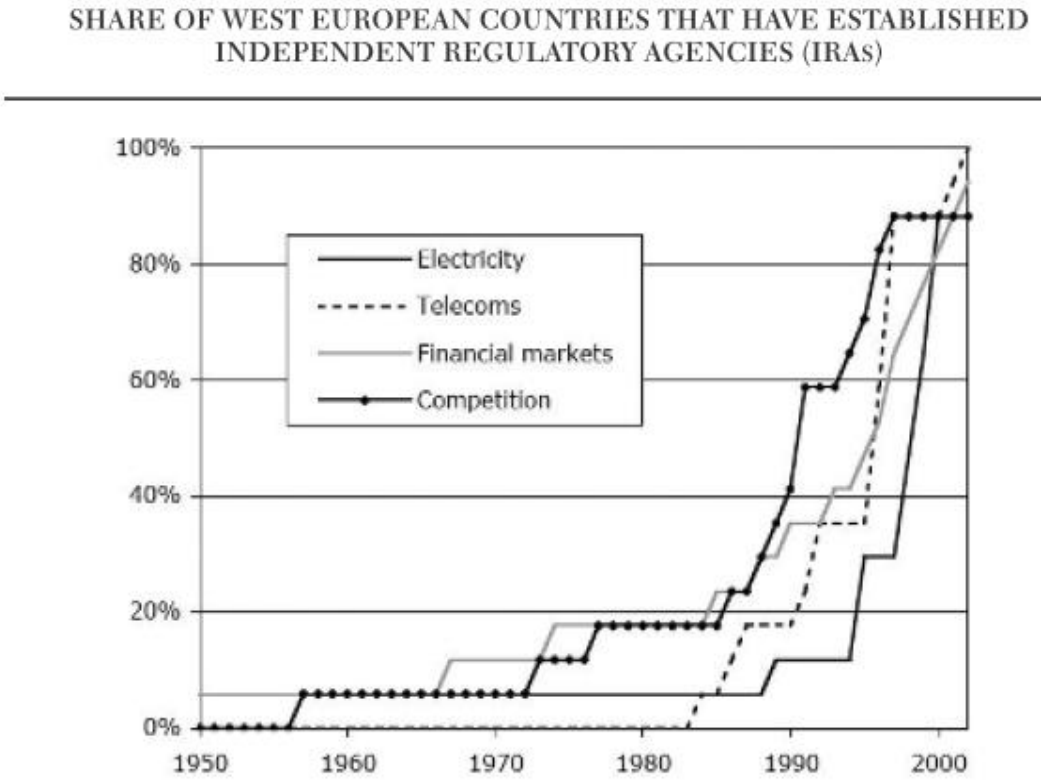
The restructuring process of the electricity sector in Albania, as in other developing countries, aimed to shift from a vertical integrated structure into a structure with legally, functionally and financially separated organizations. This would lead to the creation of new entities for generation, transmission and distribution activities, and achieving in the same time the harmonization of the domestic energy legislation in accordance with the European Union's Directives.

During the 1990s, many developed countries have being restructuring their utility sectors introducing competition in the non-natural monopoly components of the sector with the intent of achieving allocative and productive efficiency. In the electricity sector, privatizations and regulatory reforms have been introduced as a solution to the problem for the low performance in services and in lowering energy prices.

A very frequent approach adopted in this sector, in many developed countries, is the separation of ownership and control. This approach involves placing the non-competitive component under the control of an independent entity or agency in the quality of the regulator. Some disadvantages resulting from the unbundling process of the vertical integrated entity, is the potential loss of economies of scale and scope earned by the integration and rise of transaction costs because contractual agreements replace direct management control (Joskow, 2002).

The following chart 2.1, shows the evolution of establishing independent regulatory agencies in the Western Europe showing that by the end of 2000, all these countries had already established independent regulators in their electricity sectors.

Chart 2.1. Independent regulatory agencies across Western Europe.



Source: Gilardi 2004.

In Albania, the energy reform started with the establishment of "ERE" - the Albanian Electricity Regulatory Authority, which exercises its responsibilities under the authority granted by the Law No. 9072, date 22.05.2003 "On the Power Sector", and the subsequent restructuring of the sole state-owned vertically integrated company KESH, the Albanian Power Corporation.

The reform aimed to develop a safe and competitive electricity market, to ensure the power supply to all consumers at reasonable prices, in accordance with accepted

commercial and legal market principles and in accordance with the European Union directives and the Energy Community Treaty.[30] This would require following some key objectives such as: the creation of an electric industry financially and technically robust; an effective and transparent legal and regulatory framework; restructuring the vertically integrated company KESH through separating it in –generation- transmission and distribution activities and their successive preparation for privatization.

In 2004, the activity of transmission was separated from KESH through the establishment of the Transmission System Operator (OST) as a public joint stock company.

Subsequently, in 2006 the law "On Concessions" introduced more competition in the upstream generation sector by concession licensing the construction of new private hydro power plants. In 2007, the activities of distribution and retail separated from the KESH corporate through the establishment of the Distribution System Operator company (OSSH)[31].

[30] For more details, see the Albanian Market Model (AMM) on www.ere.gov.al

[31] The privatization of OSSH was implemented in 2009, when Albanian government privatized with the assistance of the World Bank, 75 % of the OSSH's shares, to the Czech firm- ÇEZ , for €102 million. The distribution license was then eventually revoked in 2013, by the Albanian government due to serious contractual failures and the company's inability to reduce losses in the grind. Under governmental control, OSHEE (Electric Energy Distribution Operator) declared for the first time a positive financial result for the year 2015, as it has always been a negative balance sheet for the previous years.

2.2 The Albanian Market Model and Energy Liberalization

Before starting my analysis on the transaction costs related to regulation compliances and other institutional performances, a short overview on the Hydro Power Plant concessions in Albania is presented as following.

Governments in Albania in the last decade are constantly focused on the country's rich reserves for developing renewable energy. To this end, there has been undertaken various measures to stimulate investments in the energy sector and to improve the entire legal framework related to the energy sector. These measures are in line with the worldwide objectives that are being undertaken by almost all countries committed in implementing the so called "Kyoto Protocol" in order to generate clean and renewable energy.

The Albanian market model (AMM) has been developed according to the EU Directives on Power and the requirements of Energy Community Treaty of South Eastern Europe for the creation of the Regional Market of Electrical Power, as ratified by the Parliament of Albanian in 2006. The Market Model also outlines the responsibilities and the interactions among, the market participants and the Energy Regulatory Entity ("ERE"). In broad terms, the Albanian Market Model is characterized by bilateral contracts for electric power between suppliers: KESH Gen[32], SPP[33]s, IPP[34]s, Public Supplier[35] and Qualified Suppliers[36] and entities serving load: DSO[37] and Eligible Customers[38].

[32] "KESH – Gen" means a division of KESH for the production of electrical power.

[33] "SPP" means a Small Power Producer connected to the distribution system.

[34] "IPP" means an independent power producer connected to the transmission system.

In particular, the AMM specifies that IPPs are independent (power) producers and SPP are small (hydro, auto-producers and combined heat and power generators) that are connected directly to the transmission system. SPPs are *licensed to* sell electrical power to the DSO/Public Supplier, to the export market, or to Eligible Customers at commercially agreed terms, or, if no agreement can be reached, on terms approved by the ERE.

The other important detail, in the AMM regarding to SPPs and thus to Small Hydropower plants in concession, is the regulated tariff: "*ERE shall also establish **a unified, simplified tariff**, for sales from small hydro SPPs under the regulated market*."

IPPs *must be licensed* by the ERE and may sell capacity or energy to the export market or to Eligible Customers, Qualified Suppliers and Traders at market prices, or to the DSO/Public Supplier *with a contract price approved by the ERE.*

[35] "Public Supplier" means a structure functionally and financially separated organized within DSO that performs the function of electricity supply for tariff customers

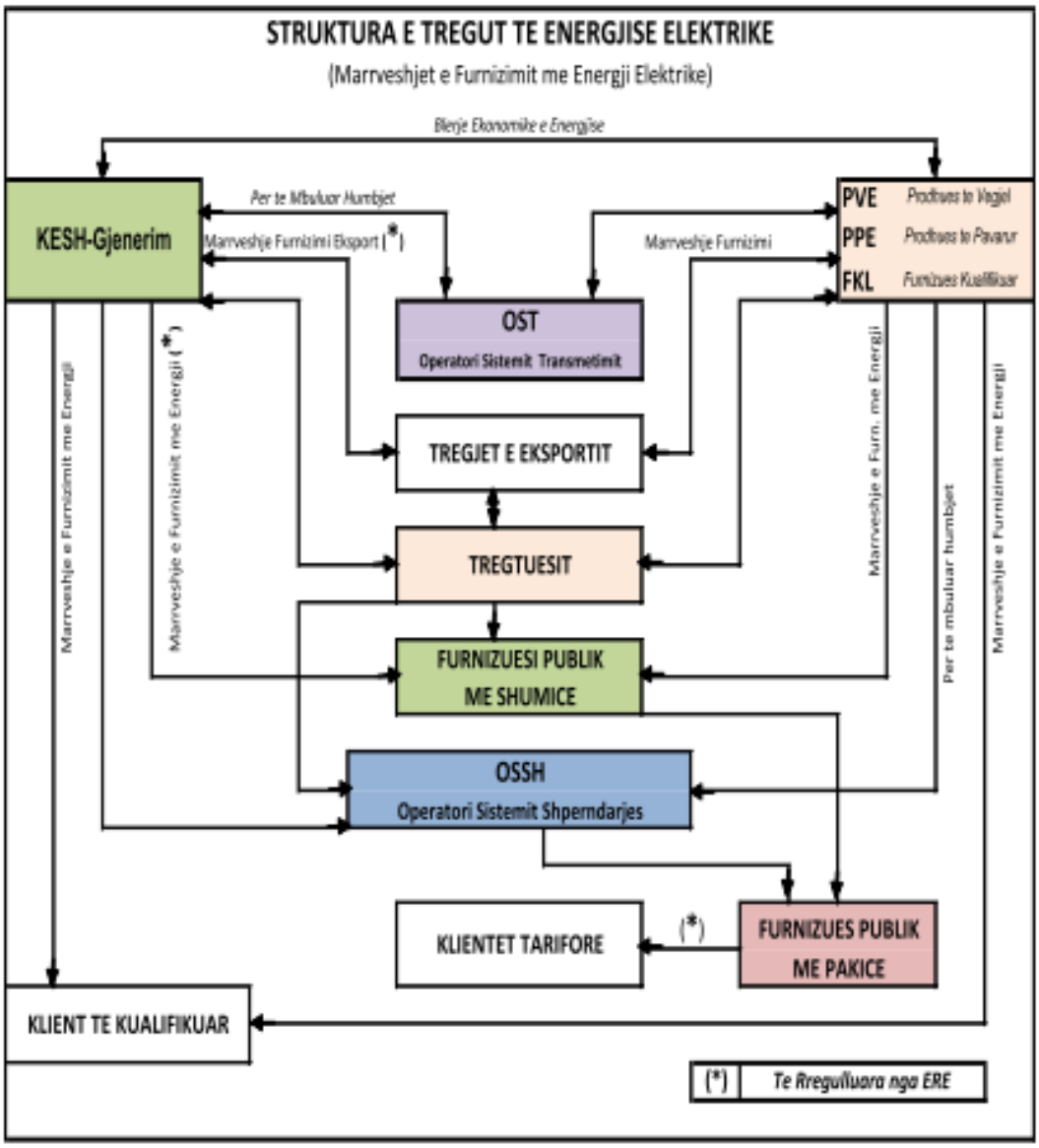
[36] "Qualified Supplier" s means a participant of the market, licensed to supply with electrical power Eligible Customers.

[37] "DSO" means the Distribution System Operator that performs the functions of distribution and public supply.

[38] "Eligible Customer" is a consumer of electrical power that has the right to choose from whom to purchase the electricity for personal consumption

The structure of the Albanian Electricity Market is presented in the following figure:

Figure 2.2-1: Structure of the Albanian Market Model.

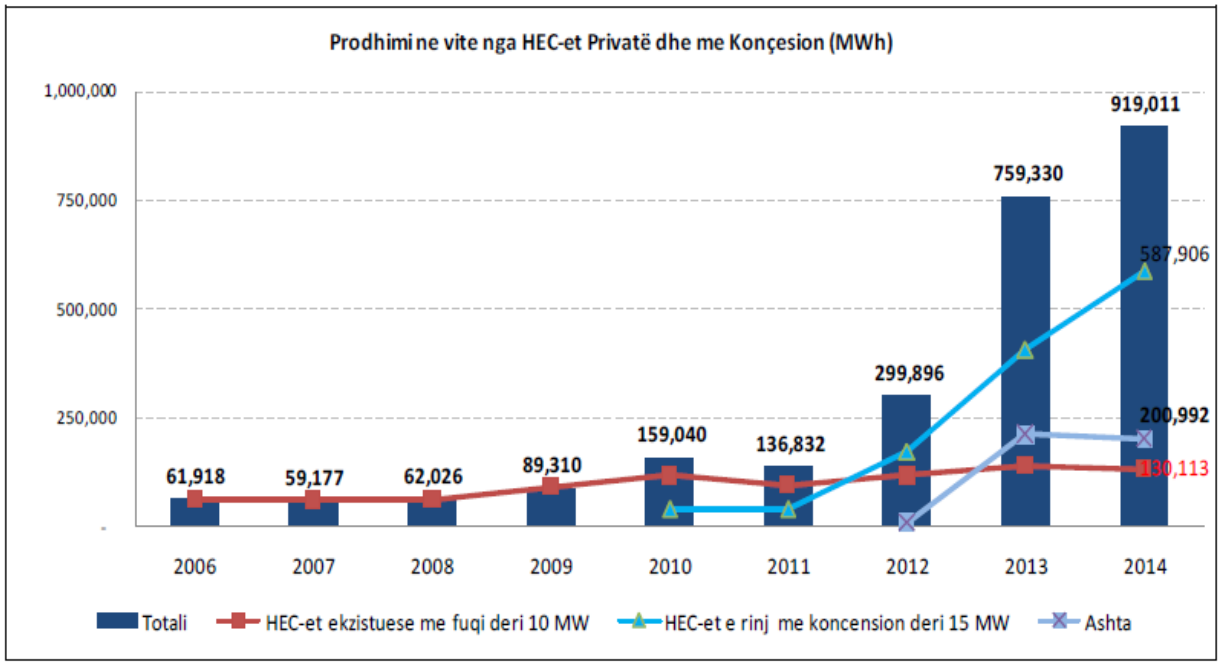


Source: ERE (VKM no.338/19.03.2008)

In this figure, we see that Small Power producers (PVE) and Independent Power producers (PPE), are regulated by ere and different supply contracts with the other operators.

The effect of market liberalization in production can be noticed in the continuous increase of energy produced by small and medium hydropower plants in the next figure.

Figure 2.2-2. Electricity production of new HPPs under concession.



(*Source* ERE)

Figure 2.2-2, shows the increasing energy production (2010-2014) of the new hydropower plants under concession (the blue line). A more complete analysis of this chart is described in the last chapter.

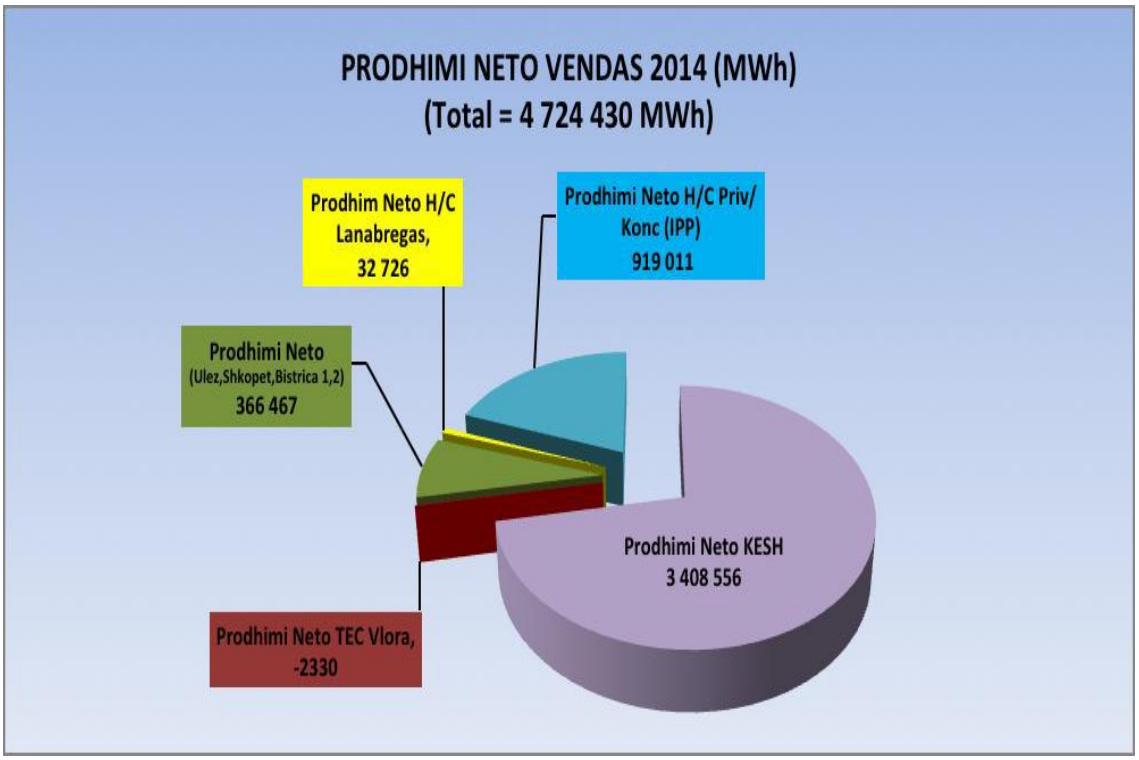
According to the ERE's annual latest report, the electricity produced for the public consumers in 2014 was realized 100% from hydroelectric power plants (HPP).

The net total production of 4,724,430 MWh was compound by:

- 3,406,226 MWh of KESH's hydroelectric power plants (state owned production)
- 1,318,204 MWh from other hydropower plants.

The next figure, shows the net electricity produced during 2014, split by different producers.

Figure 2.2-3 Net domestic production 2014.



(Source, ERE)

In 2014, there were 98 private and concessionaire hydro power plants producing electricity: 93 of them have had sales contract with KESH, one is disconnected from the public service and 4 others have produced energy for their own needs or to be traded.

These 93 hydropower plants that have sales contract with KESH, have a total installed power of about 294.28 MW, of which about 37.49 MW comprise HPPs that have started production in 2014. The total output for 2014 from these private / concessionary generators was 919 GWh or 19, 45 % of the total net domestic energy production during 2014. This group of producers includes the "Ashta" hydropower plant with an installed

capacity of 50 MW which has produced in around 201 GWh; the "Lanabregas" HPP, which is detached from KESH and has an installed power of 5 MW and has produced 32.7 GWh in 2014; Four HPPs: "Ulez", "Shkopet", "Bistrica 1" and "Bistrica 2" that have an installed power of 76 MW and produced approximately 366.5 GWh.

The positive performance in the Albanian electricity generation was recently reported also by the World Economic Forum in the Global Energy Architecture Performance Index Report 2016, as shown in the following figure.

Figure 2.2-4. The energy architecture performance index 2016 ranking:

	Country	2016 score[2]	Economic growth and development	Environmental sustainability	Energy access and security	2009-16 trend[3]
1	Switzerland	0.79	0.72	0.76	0.88	▲ (+1)
2	Norway	0.78	0.65	0.74	0.95	▼ (-1)
3	Sweden	0.76	0.61	0.80	0.89	▲ (+1)
4	France	0.76	0.60	0.80	0.88	▼ (-1)
5	Denmark	0.76	0.67	0.70	0.91	▲ (+1)
6	Austria	0.75	0.64	0.74	0.88	▲ (+3)
7	Spain	0.75	0.65	0.74	0.87	▲ (+5)
8	Colombia	0.75	0.74	0.67	0.84	▲ (+3)
9	New Zealand	0.75	0.59	0.75	0.90	▲ (+4)
10	Uruguay	0.74	0.69	0.73	0.81	▲ (+16)
11	Portugal	0.73	0.60	0.74	0.85	▲ (+3)
12	Finland	0.73	0.53	0.78	0.87	▼ (-5)
13	Costa Rica	0.73	0.68	0.76	0.75	▼ (-3)
14	Latvia	0.71	0.61	0.72	0.81	▲ (+4)
15	Slovenia	0.71	0.56	0.72	0.87	▲ (+5)
16	United Kingdom	0.71	0.60	0.66	0.89	▼ (-1)
17	Albania	0.71	0.65	0.80	0.69	▲ (+17)
18	Croatia	0.71	0.63	0.67	0.82	▲ (+13)
19	Hungary	0.70	0.58	0.73	0.81	▲ (+14)
20	Peru	0.70	0.75	0.65	0.70	▼ (-1)
21	Paraguay	0.70	0.66	0.81	0.63	▲ (+2)
22	Italy	0.70	0.58	0.67	0.84	▲ (+2)
23	Ireland	0.70	0.64	0.65	0.80	▲ (+2)
24	Germany	0.70	0.58	0.63	0.87	▼ (-8)
25	Brazil	0.69	0.59	0.70	0.79	▼ (-17)

Source: *Global Energy Architecture Performance Index Report 2016*, World Economic Forum.

According to Performance Index Report, Albania (17th) boasted fully decarbonized electricity generation (0g CO2/kWh), which is reflected in above-average environmental sustainability scores, proving the commitment of Albanian governments to meet Kyoto's Protocol obligations.

As mentioned previously, the focus of my analysis will be on the concessionary contracts under implementation and signed after the entry in force of the Law No. 9663, dated 18.12.2006 "*Law on concessions*", using the database published by the Albanian Ministry of Economy[39], in which during the period 2007-2010 there were signed 98 concessionary contracts for the construction of 260 HPP-s and with a total power installed capacity of 1.2 million kW.

Since these licenses for constructing hydro power plants are given in an exclusive regime of 35 years and within a certain delimitation or segmentation of the river basin, the number of new concessions licenses released during in the following years (2011, 2012 and 2013) decreased since there were few river segments left to be exploited[40].

In fact, by the end of 2013, the total number of HPP concessionary contracts was 132 and by the end of 2014, only 32 "successful" contracts had HPP working and producing electricity.

According to the Ministry of Environment, in 2015only 180 hydropower plants had provided environmental licenses out of a total 400 hydropower plants licensed by the Ministry of Energy since the entry in force of the Law *on Concessions*.

The following chapters the analysis is focused on time, costs and procedures for these concessions .

[39] Www.mete.gov.al

[40] In fact there are some ongoing debates regarding the impact the construction of new HPP licensed during 2013, on the fauna and flora of the respective rivers going through protected areas. See for e.g. the debates about HPPs on the Valbona and the Vjosa basin.

2.3 Regulation by Contract

Spiller[41] emphasizes that regulatory contracts, which are the forms that the governance of interactions between governments and investors take, are to be understood jointly with the inherent hazards of these interactions. Spiller focuses on two hazards: *governmental opportunism*[42] and *third party opportunism*. In previous writings (1996a and 1996b), the author emphasized governmental opportunism as the fundamental risk of investors in public utilities, and how regulation by contract may limit such risk. Regulation by contract requires, according to Spiller, a judiciary that not only will see such a contract as property and thus that cannot unilaterally be modified by the government, but also that will have the ability to enforce it. Facing these risks, then, private utilities may require that such regulatory contracts be highly specific, so as to limit opportunistic interpretations of contracts (Spiller, 2011, p.6).

In Spiller (1996a) we find *concession contracting* [43]as a regulatory instrument choice based on the need for regulatory credibility given the nature of the institutional environment in which the investment is undertaken. Concession contracts, then, arise as a mode for organizing provision of public services precisely because regulation by

[41] For more details see Spiller 2009 and 2011.

[42] By governmental opportunism the author refers to the ability of governments to opportunistically change the rules of the game once the utility sunk its investments. See, Spiller (1996a and 1996b), and Levy and Spiller (1994).

[43] *Concession contracts are part of the general set of licenses and permits through which states grant the right to a private organization to undertake a particular public-service activity but, differ from other types of legal instruments since they tend to embed the basic regulatory framework that will guide their evolution as it relates to basic features such as prices, quality, penalties, termination and the like* . See Spiller (1996a.).

contracts sets limits to unilateral regulatory changes, and by doing that, it mitigates the potential for governmental opportunism (Levy and Spiller, 1994).

Spiller observes that, "*regulation by contract is especially preferred in sectors with a high level of sunk assets (e.g., water, transport, natural gas, and electricity distribution), in politically unstable environments, and when regulation by law does not provide enough credibility to protect the investments of the service providers."* Concession contracts, by creating an individualized regulatory framework for the investments at hand, limit such opportunism. Spiller, (2011 p. 21).

In the theory of transaction cost economics, as emphasized by Coase (1964) and later by Williamson (1979), the analysis of regulation should be carried out within the proper institutional comparison and thus, the supposed inefficiency of regulatory contracts, and of regulatory outcomes, must be assessed in reference to all relevant alternatives[44].

In this circumstances, hydropower plants investors providing a *public utility* [45]service, regulation by concession, in the form of concession licenses, may limit governmental opportunism due to presence of high sunk- costs and the asset specificity of these investment[46].

[44] See Williamson , (1996).

[45] In Spiller (1995), utilities are defined as those sectors having three fundamental features: first, their products are consumed widely; second they exhibit important economies of scale and scope at the relevant levels of demand; and finally, that their investments are characterized by a high level of physical specificity (i.e., have a high component of sunk investments).

[46] Power generators, turbines, civil works and technology are relative to a specific river basin with certain characteristics and can't be simply moved elsewhere.

CHAPTER III: BIDING AND PRE-CONTRACTUAL PHASE

According to Williamson (1985), Transaction Cost Economics poses the problem of economic organization as a problem of contracting where a particular task is to be accomplished. It can be organized in any of several alternative ways. Explicit or implicit contract and support apparatus are associated with each. What are the costs?

Transaction costs of *ex ante* and *ex-post* types are usefully distinguished. The first are the costs of drafting, negotiating, and safeguarding an agreement (Williamson 1985. pp. 20). In the following section these costs will be described in relation to the procedures for participating in the bid for concession right.

In this chapter there are presented the main phases for organizing, launching and evaluating the bidding procedures for granting the hydro power plant concessions according to the regulation in force in Albania.

There are presented the procedures for both solicited and unsolicited concessionary proposals, the legal and technical obligations the bidders must meet in order to participate into the bid, participation fees and technical studies from professionals that require time and resources.

3.1 The bidding process and participation costs

The entry into force of Law "On Concessions", in December, 2006, new perspectives in the form of public- private partnership raised for the energy sector in Albania. This law aims to establish a framework for promoting and facilitating the implementation of concession projects which are funded by the private sector, increase transparency, equality, efficiency and sustainability in developing infrastructure projects and public services. The law aims to a further development of the general principles in concluding agreements with public authorities through the establishment of specific procedures in granting concession projects and essentially defines the conditions, the methods and procedures for granting the concessions right in the Republic of Albania.

In the case of hydropower plant concession licensee[47], the procedure starts generally needs the involvement of a private firm which makes a formal request to exploit a part of a river by making pre -feasibility study proving that the proposed project is rentable. This kind of procedure started by the private initiative, is called "unsolicited proposal" and represents the majority of the cases, in contrast to a few cases of state initiative called "solicited proposal", where the state is the promoter for starting the bidding procedure especially for those concessions particularly big and of national interest.

The granting procedure starts with the identification of the potential concession. In the case of unsolicited proposals, identification is done by the proponent of the concession project, through the evaluation of the sector or regional strategies of development, the relevant studies, and the technical and financial feasibility analysis.

[47] Mainly in the form of Built-Operate-Transfer (BOT) contracts, where the HPPs are transferred to the state by the end of the concession license.

Following the identification of the potential concession project, for both solicited and unsolicited proposals, the Concession Unit (CU) established by the Contracting Authority[48] (CA) conducts a feasibility and cash flow analysis in order to decide whether the concession should be granted. Such analysis is based on the alignment of this potential concession with the national strategic objectives and the sector's strategic objectives; technical and commercial feasibility of the concession; and its ability to attract potential concessionaires and private financing.

The Councils of Ministers approves the concessions "Decision", recognizing to the submitting firm a *bonus* up to a maximum of 10% of the total score for the bid and delegates to the Contracting Authority the legitimacy to start the bidding procedures and selecting the winner. The practice[49] has shown that for the identification phase the normal time needed from submitting the project of interest till the Council's Decision, takes approximately up to 6 months.

After the identification of the potential concession, the Contracting Authority starts the bidding selection procedure. The rules for the organization of the bidding procedure for both solicited and unsolicited proposals are implemented in base of the relative "Order" issued by the Contracting Authority for the beginning of procedures for the granting of concessions.

The Order defines:

- The form of procedures and the stages;
- The establishment of the "Unit" for the drafting of documentation and organization of bidding procedures;
- The establishment of the Bid Evaluation Commission;

[48]Contracting Authority is the Public Authority enabled to sign the concessionary agreement.

[49]There is no data recorded for this "concession identification phase"

- The participation of the local and foreign expert consultants, when the Contracting Authority judges it appropriate.

After the preparation and the approval of the bidding procedure documents, it is published the *invitation for proposals* form.

All the expenses made by privates to participate in the bidding procedures are not refundable by the Contracting Authority the publications to local and international medias of the call for proposals are charged to the winning concessionaire.

The auction process, which is a sealed- bid auction based mostly on characteristics like concessionary fees and annual energy production and that can be either one stage or contain a prequalification phase, starts in the day and the place specified in the invitation for bids.

The interested bidders who already have withdrawn the standard documents[50] of the bidding procedure, submit the list of legal and administrative documentation in the form required by the Contracting Authority. In addition to the specific documents required for the bid like feasibility studies[51], other documents required by the evaluating commission to make the selection. These documents consist in possessing the technical and professional capacities by submitting technical certificates, certificates of successfully concluded engineering civil works, documents proving works in similar concessions, professional licenses and qualification of the working staff, the technological state of art or documents proving of having the necessary financial means for the project.

[50]These documents comprise general and specific information related to the facility of the contract and the kind of procedure, which is always supplied by the Contracting Authority.

[51]More specifically, the feasibility studies contains: Hydrologic study, Geologic – engineering report, Hydro -technical and Hydro- logical report, Study for the electric scheme and the connection to the energetic system, Business Plan and working graph, Report on evaluation of the impact on environment.

Another extra cost sustained by all the participants in the bid, is represented by the *bid insurance form*. The bid insurance has the form of a deposit or guarantee issued by a bank[52] or an insurance company. The qualified bidders or candidates have to submit by Law , the *bid insurance* with a value of 2 % of the investment cost in the project. The bid insurance should be valid for 150 days from the final deadline for the submission of the offers, but the bidding procedure documents may envision a different validity period based on the potential duration of the procedure. The Contracting Authority frees the bidder within 15 days from the signing of the contract and within five working days from the date of the awarding of the contracts to the other bidders.

During 2007, right after the entry into force of Law "On Concessions", there were organized 38 granting procedures with a time lag between the publication of the date for the call for proposals till the offer's auction, that is between 35 and 90 days. It takes usually one month for the call for proposals to be published on the newspapers since the Minster Council's Decision is published by approving the initial unsolicited proposal. Below there are presented some summary statistics, using the observations 1 – 38 for the variable 'Time_to_bid_offer' (38 valid observations) in days.

Mean	62.763
Median	60.500
Minimum	35.000
Maximum	90.000
Standard deviation	16.469

In this preparatory phase for granting the concession license, it takes in medium two months to organize the procedures for opening the bid's offers, while potential concessionaires have to present their proposals on the day specified in the call. The next section deals with the evaluating stage of the projects presented by the bidders finding that sometimes this stage goes on for longer time than it was predicted in the bid insurance form (150 days) forcing the bidders to renew their insurance forms by causing further additional costs.

3.2 Evaluation and winner selection

The evaluating phase of the projects submitted starts immediately after the opening of the bid offers. According to the Decision of the Council of Ministers No. 27, dated 19.01.2007, the opening of the offers is opened to public. The Evaluating Commission opens and reads the bids in the presence of the bidders.

The Commission informs the bidders about the date, place, and time related to the final classification of the bidders and then continues to evaluate the offers. First, the Commission checks the legal and qualification documents. Then evaluates the financial offers of the qualified candidates and the technical classification based on the scores given to the bidder, in conformity with the criteria defined by the Contracting Authority. Based on the qualified offers, the Evaluating Commission prepares the final ranking, which is published at the time specified in the auction documents.

Based on the admitted offers, the Evaluating Commission drafts the final classification, which is communicated to the bidders at the specified time. For the concessionary projects, with an investment value up to 5 million Euro, the Evaluating Commission has to express its decision within 30 days; for concessionary projects having an investment value between 5 to 50 million Euro, the evaluating time limit is 60 days and for investment concessionary projects requiring financing of more than 50 million Euro, the Evaluating Commission has a limit of 90 days to express its decision.

When the commission finds it impossible to express its evaluation within these time limits, it asks to the chairman of the Contracting Authority, by writing an official letter, to extend the evaluation procedure. Sometimes this stage goes on for longer time than it was predicted (150 days) in the bid insurance form, forcing the bidders to renew their

insurance forms by causing further additional costs such as opportunity costs and other fees connected to the expert's assistance.

CHAPTER IV: POST-CONTRACTUAL PHASE AND MONITORING

The present chapter describes the next stages that follow the procedures presented in the previous chapter. The public authority in this stage deals with drafting the concession agreement, contract terms negotiation and after signing the contract, post contractual monitoring.. In the line with the situation presented above, an interesting topic to develop in the future would be dealing with the costs of monitoring, which is a topic of debate between scholars when considering if regulate an activity or not regulate it at all[53]. In this stage, the winning concessionaire still affords costs to meet the regulatory obligations. For instance, the bidder who has been awarded the concession should submit to the Contracting Authority a *contract insurance* with a nominal value up to 10 % of the value of the project proposed if the installed power is less than 15 MW, 7% if the installed power is between 15 and 30 MW and 5 % for projects when the installed power is higher than 30 MW, leading to high opportunity costs by blocking considerable financial resources for a long period of time (until the plant is finished). Further costs are expressed in days of waiting for getting various permits, especially dealing with construction permit which takes on average 331 days. The monitoring phase, might increase investment costs because investors might get fines or penalty by the Contracting Authority for uncompleted works . In this case, the mean incidence of the fine is approximately 0.6 % of the total investment cost. Providing the construction permit and financial recourses seem to be the main reason to cause delays in implementing the projects to many concessionaires.

[53]See Posner's (1974) alternative point of view regarding the economic regulation.

4.1 Contract negotiation and the contract insurance

Once the Bid Evaluation Commission finishes the evaluating process, presents to the Contracting Authority the final report on the evaluation of the bid. On the basis of this report, the Contracting Authority ranks all the admissible bidders and informs the bidders about the ranking.

The Contracting Authority orders the establishment of the negotiation group where its Members are representatives of the Concession Unit and the Bid Evaluation Commission. The Contracting Authority, unless receiving any notification of some complaints by the Public Procurement Agency, invites for negotiations the first qualified bidder.

Before starting the contract negotiation process, the selected bidder submits the *contract insurance form*. This serves as a guaranty for the Contracting Authority in cases of breaches of the contract. Prior to the signing of the contract, the bidder who has been awarded the concession should submit to the Contracting Authority a contract insurance worth up to 10 % of the value of the project if the installed power is less than 15 MW, 7% if the installed power is between 15 and 30 MW and 5% for projects where the installed power is higher than 30 MW. If the selected bidder fails to submit the contract insurance within the final deadline[54] defined in the notification of the winning bidder, then the Contracting Authority confiscates the *bid insurance* (worth 2% submitted in the initial stage) and awards the contract to the holder of the second place in the final classification. The contract insurance has validity up 30 days after the date of issue of the certificate of ending successfully the works.

[54]Within 30 days from the notification date.

Regarding to the contract negotiation process, the concessionary contract contains topics that can be negotiated and others that are not negotiable between the parts. In relation to the non negotiable conditions of the HHP concessionary agreement, are the following:

1. The requests of the Contracting Authority in relation to the implementation of the project and the bidding documents;
2. The evaluation criteria;[55]
3. The technical proposal of the bidder ;
4. Conditions or deadlines specified by law .

Regarding to the negotiable conditions, in this category enter all the other conditions predicted in the concessionary contract.

When the parts agree to sign the concession agreement, it enters in to force and the new concessionaire has to establish within 30 days the new concessionary firm, which as shown in the *Doing Business* database, can be established within 5 days.

In the end of 2010, there were concluded 93 concessionary contracts and 9 other contracts were in the contract negotiation process.

Below there are some summary statistics, using 78 observations for the variable 'Evaluation_and_Negotiation' that represents the duration in days between the publication of the bid call till the date the concession's agreement enters in force.

Mean 233.90 (Days)

[55]The evaluation criteria are: Production of average electric energy annually; Power installed; Cost per machinery unit; The scheme of electrical connection with the electro-energetic system; Time (in months) of putting into use of the HHP; The environment and social impact; the amount in % of the Concessionary fee (royalty) offered by the bidder.

Median	225.50
Minimum	19.000
Maximum	637.00
Standard deviation	120.95

The observations refer to procedures started form the early 2007 till the end of 2009. The summary statistics presented above reveals a standard deviation of 4 months that is actually very high considering the large number of observations. This implicates that many bids are delayed in the evaluation phase because the evaluating commission needs additional time or because the evaluating process is stopped by other institutional procedures like the courts or by the Public Procurement Agency due to disputes between bidders.

4.2 Monitoring and penalties

The Contracting Authority, directly or through its dependent agencies monitors the activity of the concessionaries. The monitoring is either administrative by asking to the concessionaire to present progress reports, or done *in place* by the Contracting Authority itself. Actually, one of the main problems to be assessed by the Contracting Authority is the lack of congruence with the working graphic submitted at the bid, with the actual working progress situation and the problem of getting in time all the licenses needed (especially for the construction permit).

In relation to this, *Doing Business* data reflect how easy (or difficult) it is to deal with construction permits in Albania today. Data over time show which aspects of the process have changed and which have not. The ease of dealing with construction permits in Albania over time by Doing Business yearly report, shows for the period taken in consideration (2006-2012), it was needed 331 days to obtain the construction permit.

The Contracting Authority taking in consideration these long delays, recognizes a maximum of 18 months for providing all the permits and licenses necessary to start the implementation of the project.

During the monitoring process, in 2011, the Contracting Authority evidenced 16 concessionary agreements (approximately 16 % of the concessionary agreements) with several delays in their working program, charging penalties to these firms in relation to the missing days. The summary statistics below is obtained using the 16 observations of the variable 'Penalty_in__%_of_Investment cost'.

Mean	0.60125 %
Median	0.49250 %
Minimum	0.0050 %
Maximum	2.1900 %
Standard deviation	0.70008

The mean penalty is approximately 0.6 % of the investment value of the concession, reaching a maximum of 2.2 %. Except for the time needed to obtain the construction permit, another reason that explains these delays in implementing the project was the financial crisis, started in the end of 2007 by seriously hitting the banking sector in the following years.

The next table, is taken from the World Bank, *Doing Business 2016* on enforcing contracts. According to data collected by Doing Business, contract enforcement takes 525 days and costs 34.90% of the value of the claim. Most indicator sets refer to the largest business city of an economy, except for 11 economies for which the data are a population-weighted average of the 2 largest business cities.

Globally, in 2016, Albania stands at 97 in the ranking of 189 economies on the ease of enforcing contracts (figure attached). The rankings for comparator economies and the regional average ranking provide other useful benchmarks for assessing the efficiency of contract enforcement in Albania.

Figure 4.2 Enforcing contracts in Albania

				Enforcing Contracts					
Economy	**Year**	**Ease of Doing Business Rank**	**Overall DTF**	**Rank**	**DTF**	**Time (days)**	**Cost (% of claim)**	**Procedures (number)**	**Quality of judicial processes index (0-18)**
Albania	DB2004	..	..	..	59.4	390.0	38.7	..	..
Albania	DB2005	..	..	..	59.4	390.0	38.7	..	..
Albania	DB2006	..	..	..	59.4	390.0	38.7	..	..
Albania	DB2007	..	..	..	59.4	390.0	38.7	..	..
Albania	DB2008	..	..	..	59.4	390.0	38.7	..	..
Albania	DB2009	..	..	..	59.4	390.0	38.7	..	..
Albania	DB2010	..	62.17	..	59.4	390.0	38.7	..	..
Albania	DB2011	..	62.34	..	60.52	390.0	35.7	..	..
Albania	DB2012	..	58.67	..	60.52	390.0	35.7	..	..
Albania	DB2013	..	58.9	..	58.89	450.0	35.7	..	..
Albania	DB2014	..	59.37	..	56.84	525	35.7	..	..
Albania	DB2015	62	66.77	96	57.37	525	34.9	..	8
Albania	DB2016	97	60.5	96	57.37	525	34.9	..	8

Source: World Bank, *Doing Business* 2016.

As we can see, there has been a regress on the ease of doing business in Albania, losing 35 places by ranking the 97-s economy in the world, this probably the centralization of construction permits in 2015.

Post contractual phase, as mentioned earlier by Williamson (1985), is subject to *ex-post cost*[56] of contracting and what Spiller introduced subsequently, governmental opportunism . According to Spiller[57], facing the threat of governmental opportunism, private agents would require stronger safeguards to undertake contracts with the state than they would in contracts with other private agents. These safeguards may involve making the contract even more complete and more specific so as to avoid opportunistic interpretations or the transfer of some of the specific investments to the state.

Spiller (1996a), emphasizes the role of the courts can be critical in reducing governmental opportunism:

"*The potential for the opportunistic use of legislative powers depends, to a large extent, on the control the executive may exercise over the legislature. Thus, a fragmented polity may provide more assurances to investors than a highly centralized government. Similarly, a judiciary with a tradition of independence may put some limits on opportunistic governmental behavior. Concession contracts, as long as they are upheld by the local courts, may also provide a level of commitment against opportunistic behavior. It is, thus, not surprising that the UK, a country characterized by a centralized government but with a long tradition of judicial independence, would have adopted a regulatory system based on concession contracts, while the regulatory structure in the US, a country characterized by fragmented government, is based on judicial review of administrative procedures*" in Spiller, 1996a.

In the case of Albania, Doing business registered negative performance in Enforcing contracts and courts are largely blamed to be politically captured and biased[58] making private firms difficult to operate is such economic environment.

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[56] These include : (1) the maladaption costs incurred when transactions drift out of alignment in relation to "shifting contract curve" , (2) the haggling costs incurred if bilateral efforts are made to correct ex post misalignments, (3) the setup and running costs associated with the governance structures (often not the courts) to which disputes are referred, and (4) the bonding costs of effecting secure commitments. In Williamson 1985, p. 21.

[57] See Spiller and Levy 1994, Savedoff and Spiller 1999

[58] Note the actual debate on justice reform and the European recommendations on justice reforms in Albania.

CHAPTER V: TRANSACTION COSTS IN SUCCESSFUL CONCESSIONS

Williamson (1985), in his analysis on transaction cost economics, notes that the *ex ante* and *ex post* costs of contract are interdependent. Put differently, "*they must be addressed simultaneously rather than sequentially. Also, costs of both types are often difficult to quantify. The difficulty, however, is mitigated by the fact that transaction costs are always assessed in a comparative institutional way, in which one mode of contracting is compared with another. Accordingly, it is the difference between rather than the absolute magnitude of transaction costs that matters".* (Williamson,1985, p.21).

In this last chapter , transaction costs analysis is focused on those concessions which have successfully passed all the phases described in the previous chapters and have finally started producing electricity. Since firms which chose to participate in privatizing bid to award a state-owned hydropower plant, don't need to pass all the procedures and legal requirements analyzed previously in the third and fourth chapter for granting a hydropower concession license, I use the privatizing procedure as a benchmark of "zero transaction costs" in meeting legal requirements.

- **Hypothesis**: "Firms bidding for HPP concession licenses in the form of BOT contracts (Build-Operate-Transfer), encounter high transaction costs compared to firms participating in bid for the privatization of existing hydropower plants"
- **Objective**: Estimate opportunity costs caused by delays in production in the form of missing revenues for the entrepreneur.

5.1 Successful HPP concessions and privatizations

Since the entry in force of the Low on concessions, between 2007 and 2013 the Ministry of Economy and Energy had negotiated and concluded approximately 132[59] concessionary contracts and in the end of 2014, only 32 concession contracts were "successfully" implemented and producing electricity.

In the first months of 2013 a debated privatization of four[60] existing HPP took place. The auction started on 21-st of December 2012, after several failures because of lack of interest of participants[61] and was closed with the highest offer of the "Kurum International Group", offering a total of 109.7 million Euro for four working Hydro Power Plants.

On January 09th -2013, the government approved this privatization and on February 28th 2013, the parliament approved by low the 100% stock privatization of these former state owned HPP companies.

I use this privatization procedure as the benchmark for my comparative analysis in order to capture the transaction costs effect on the plants in concessionary regime by using the following hypothesis:

"There is a significant difference in transaction costs in the firms bidding for the construction of hydropower in a *concessionary* form, compared to the firms that have competed in the process of *privatization* of existing HPPs"

[59] 132 concessionary contracts for the construction and rehabilitation of 384 hydropower plants, with a total power of 1.633 MW and a total investment of 2.4 billion Euro. (Source METE, AKBN)

[60]HPP Ulëz – 25.2 MW & HPP Shkopet – 24 MW; HPP: "Bistrica I – 22.5 MW & HPP Bistrica II – 5 MW

[61]Source: "Shqiptarja.com" Newspaper, 21/12/2014.

5.2 Estimating transaction costs in successful HPP concessions

5.2.1 Methodology

The methodology adopted is similar to the one used by Lee and Alexandra Benham (2001), considered in section 1.3.1, where the cost of exchange are defined as the *opportunity cost* faced by an individual to obtain a specified good using a given form of exchange within a given institutional setting.

The way to measure the cost of exchange would be according to the authors equal to the value of the firm's (entrepreneur and staff) time spent in registering + payments to facilitators + official fees.

Modifying the model for the HPP construction under concessionary regime:

- The costs of exchange (opportunity costs) = Production costs + Transaction costs, where:
  - Production costs (Value of civil works + Machineries + line construction) = Investment cost
  - Transaction Costs = Monetary (tariffs, fees, intermediaries etc.) + time spent (days of delays because of procedures, bureaucracies, regulations, etc.)

  Monetary transaction costs spent in tariffs, fees (contract insurances paid to insurance companies, possible penalties), intermediaries (legal assistance and technical designs) till the contract negotiation phase, can be roughly estimated around 1-2 % if compared to the investment cost.

The non monetary component of transaction costs, expressed in time spent in procedures, regulation requirements and licensing and so on, recorded in delays in production is analyzed in the following sections.

While estimating transaction costs in a cross country analysis, Lee and Alexandra Benham (2001), emphasize an important feature of transaction costs, that is their variation across individuals and countries since they are affected by factors like: tariffs, taxes, price controls, monopoly, price discrimination, information asymmetries, asset specificity, strategic behavior, and opportunism. Moreover, transaction costs vary also because of personal skills of the entrepreneur, political connections and other skills. These factors might be determinant to the success of a specific procedure and might not be deterministic in others, making it difficult to draw general conclusions.

Before starting the analysis for the all successful concessionary contracts, a specific case for a medium hydropower plant in concession is taken as an example in order to analyze it's specific investment costs and the future threats for this investment.

In 2014, a hydropower plant with an installed capacity of 15 MW, built by a private investor in partnership with the state, has an investment cost around 15 million Euro, financed by commercial banks and own private funds. The total cost can be split into the following sub costs:

• Studies, permits, licenses:	250.000 Euro
• Electro-mechanical equipments:	3 Million Euro
• Civil works for the construction:	11 Million Euro
• Capitalized Interest:	800.000 Euro
Total cost of investment:	15 Million Euro.

According to the entrepreneur, five years earlier he had started this project based on a business-plan which predicted that the capital spent on it would be returned in 10 years, taking into consideration the government's decision of selling the electricity to KESH[62] at price of 9.3 Lek / kWh.

This investment however, might be in an uncomfortable financial situation if the government get approved the new energy tariff for buying the energy produced by small HPP at a reduced tariff by 30% changing it from the actual 9.3 Lek (6,6 Euro cent) to 6.4 Lek (4,5 Euro cent) and thus making the future of this enterprise uncertain.

The estimated costs of producing 1 megawatt energy in this hydropower plant is 37 Euro, where the biggest part of these costs goes for the loan repayment then to the maintenance costs, taxes and for wages.

The new discounted price proposed by the government of 45 euro per megawatt an hour, doubles the return of the investment the period from 10 to 20 years reducing to the one third of the concession's remaining period to create profits for the entrepreneur.

This is a typical case of governmental opportunism, as presented earlier by Spiller and even though there exists an independent regulating agency as ERE, the new unified tariff for private and concessionary HHPs was set to 7,6 LEK, approving partially the government's request for a lower tariff.

[62] Albanian Power Corporation

5.2.2 Data description

As in the previous chapters, the data used in this section is collected from ERE annual reports and databases of the Contracting Authority[63]. Little inaccuracies in recording the data and some technical differences in the technology used to produce energy are taken into the consideration and are not considered to influence the overall estimated result.

Resuming some key facts presented earlier:

- Between the years 2007 to 2010, there were signed 98 concessionary contracts for the construction of 260 HPP-s and with a total power installed of nearly 1.2 million kW.
- Since then, the number of new concessions during 2011, 2012 and 2013 was decreasing because there were few river segments left to be exploited. In fact, in the end of 2013, the total number of HPP concessionary contracts was 132[64] .
- By the end of 2014, only 32 "successful" contracts, signed between 2007 and 2009, had working HPPs and producing electricity.
- Based on the investment costs of the implemented contracts, the *Average Cost of Investment* for one MW power installed is 174,899,110 LEK / MW[65] or **1.42 Million EUR / MW[66].**

[63] See in the Appendix

[64] 132 concessionary contracts for construction and rehabilitation of 384 hydropower plants, with a total power of 1.633 MW and a total investment of 2.4 billion Euro. Source: *METE, AKBN*.

[65] A total of 37.490.832.427 Lek investment for a total of 214,455 MW Power installed in 32 concessionary contracts.

[66] The average exchange rate Euro/Lek in 2008 in many business-plans was 123 LEK for 1 Euro.

- The 4 power plants privatized in 2013 for a total of 109 million Euro and with an installed power capacity of 76.7 MW, have an *Average purchasing Cost* of 109 / 76.7 = **1.42 Million Euro.**

This means that, for this specific privatization auction[67], **there is no difference** between the Average Cost of construction per MW of the HPP in concession and the Average Cost of purchasing per MW from the HPP in privatization, thus the success or the failure in the implementation of concession contracts (ignoring the negative effect of the financial crisis of these years) depends directly from the other component of total costs of exchange: the costs of transaction.

Recalling from section 5.2.1, the cost of exchange of building power plants under concession are:

The costs of exchange (opportunity costs) = Production costs + Transaction costs.

Internalizing in the production costs, for the case of constructing a hydropower plant, the cost of civil works, machineries and technical study reports, that actually compound the investment cost, we can consider production costs as equal to the total investment cost.

A. and Lee Benham. (2001), suggest that - *where transaction costs are very high, many transactions do not take place at all".* The authors emphasize that estimating transaction costs is problematic because production and transaction costs are jointly determined, leading to formidable difficulties in estimating transaction costs separately.

[67]Another auction, of HPP "Lanabregasi" was privatized at a price of 3 Million Euro per MW power installed.

Therefore we can try to estimate the transaction costs "observed" in the market by taking into consideration the various forms that transaction costs appear.

If we could split transaction costs, as previously introduced in section 5.2.1, into a) *monetary* -tariffs, fees, penalties, contract penalties and enforcements, intermediaries etc. and b) *time* spent -days of delays because of procedures and bureaucracies, regulations, legal disputes etc., we could add these costs to the other production / investment costs and get the idea of the overall exchange costs expressed in the form of opportunity costs that the entrepreneur encounters in investing in HPP- concessionary license.

Previously, some of these (monetary) costs were analyzed by diving the granting procedure into two phases: the biding and pre-contractual phase (chapter III) and contract negotiation and monitoring phase (chapter IV) for their tariffs, fees and other intermediary costs, and the non monetary by estimating the average time spent on these procedures.

In this chapter, the analysis is focused in already producing hydro power plant companies that have granted the concession license after the entry in force of the law "*On Concessions*"[68] and the variable under examination will be "DELAYS", that is the *time lag* between the *predicted date* of finishing the works by the entrepreneur and the *actual date* the plant is ready to use by producing electricity.

[68] Law No. 9663, dated 18.12.2006. Note: HPP built before 90'ies by the communist regime and given in concession or privatized before the entry in force of this law are not part of this analysis.

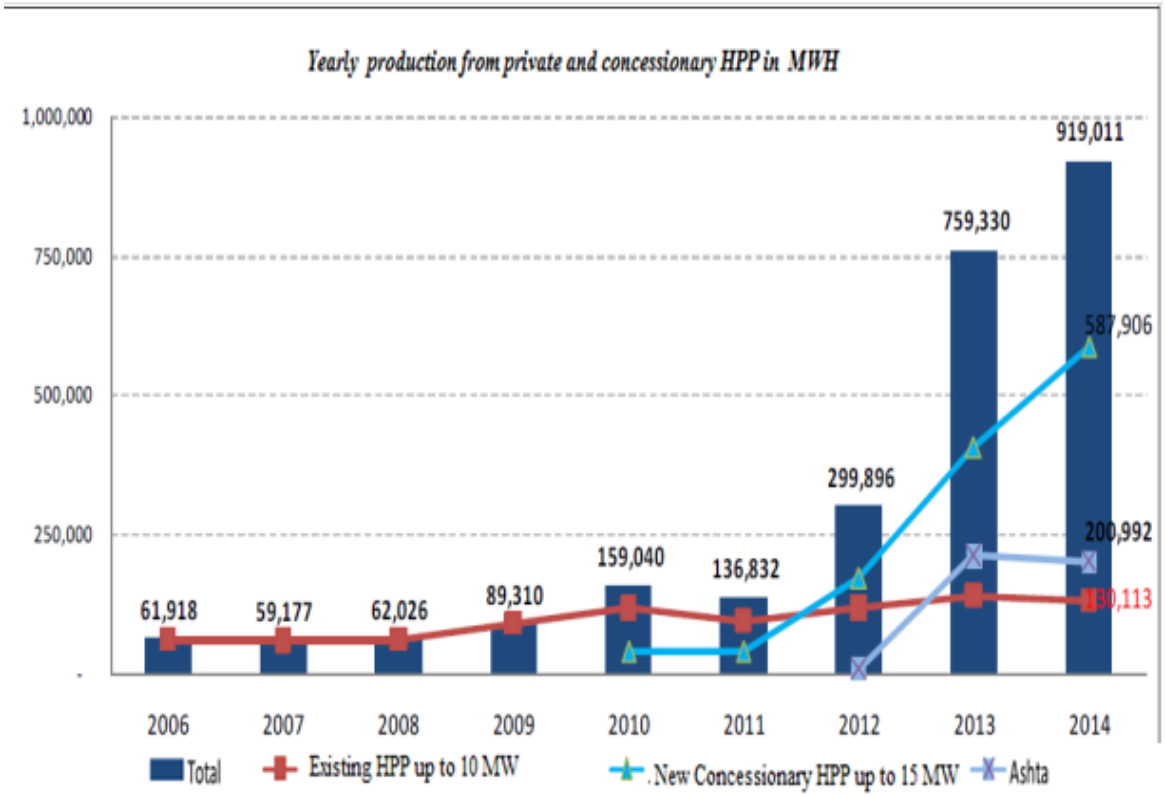
Every *delay* in starting producing, would create:

- a loss of revenues for not selling the product during this period,
- penalties from the Contracting Authority,
- and since these companies operate in a concessionary regime, every delay would shorten their licensing[69] period causing higher opportunity costs.

In the following Figure (5.1), it is shown the production performance of small HPPs either private or given under concession (up to 15 MW) and the "*Ashta HPP*" during the period 2004 - 2013. In this figure, the first new concessionary HPP start operating in 2010 (the line with triangles), almost 3 years after granting the first concessionary licenses in 2007.

[69] The energy producing license released by the ERE- Albanian Energy Regulator. www.ere.gov.al

Figure 5.1 Energy yearly production from Small HPPs.

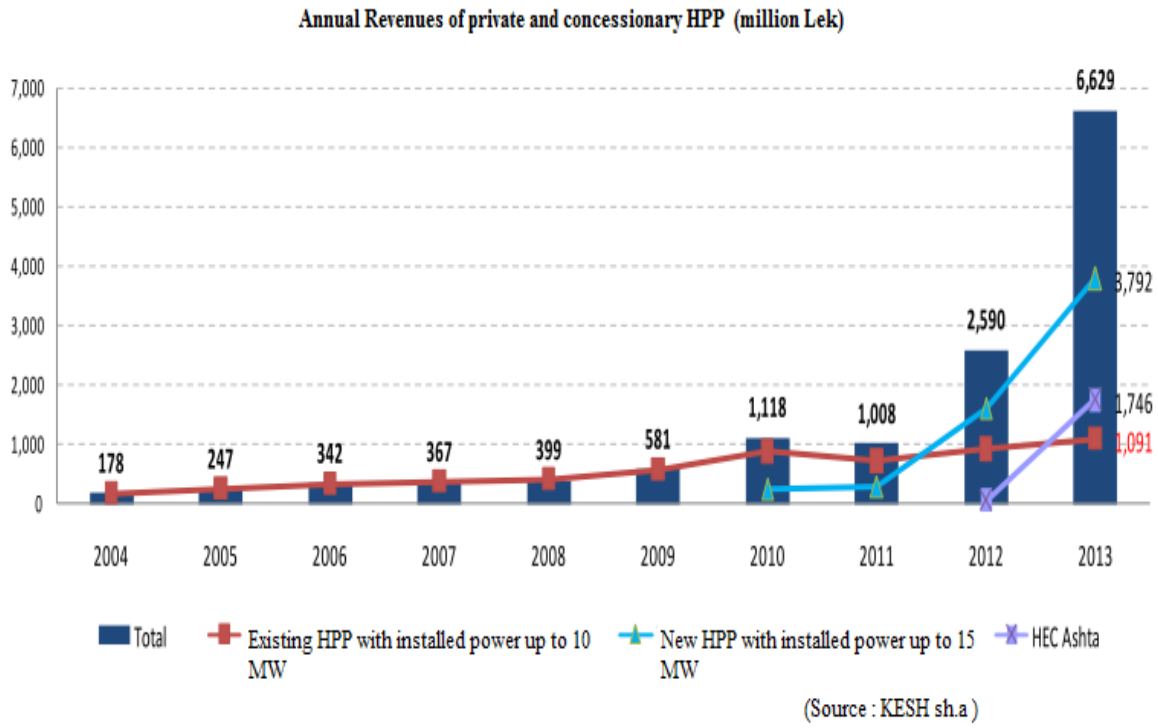


Source: ERE annual report, 2014.

Considering that the high output produced in 2010, it was also largely influenced by favorable hydro-conditions, figure 5.1 shows a high increase in production by HPP given under concession, especially during the period 2010-2014. The significant increase in 2013 where production of these HPPs was 2.5 times higher compared to the previous year continued rising even during 2014, this also due to the contribution of 13 new HPPs which started producing electricity during 2014.

The next Figure 5.2, shows the obligations of the Public Supplier to private entities for electricity sold to KESH which has increased from over 2.5 billion Lek in 2012 to 6.6 billion Lek in 2013.

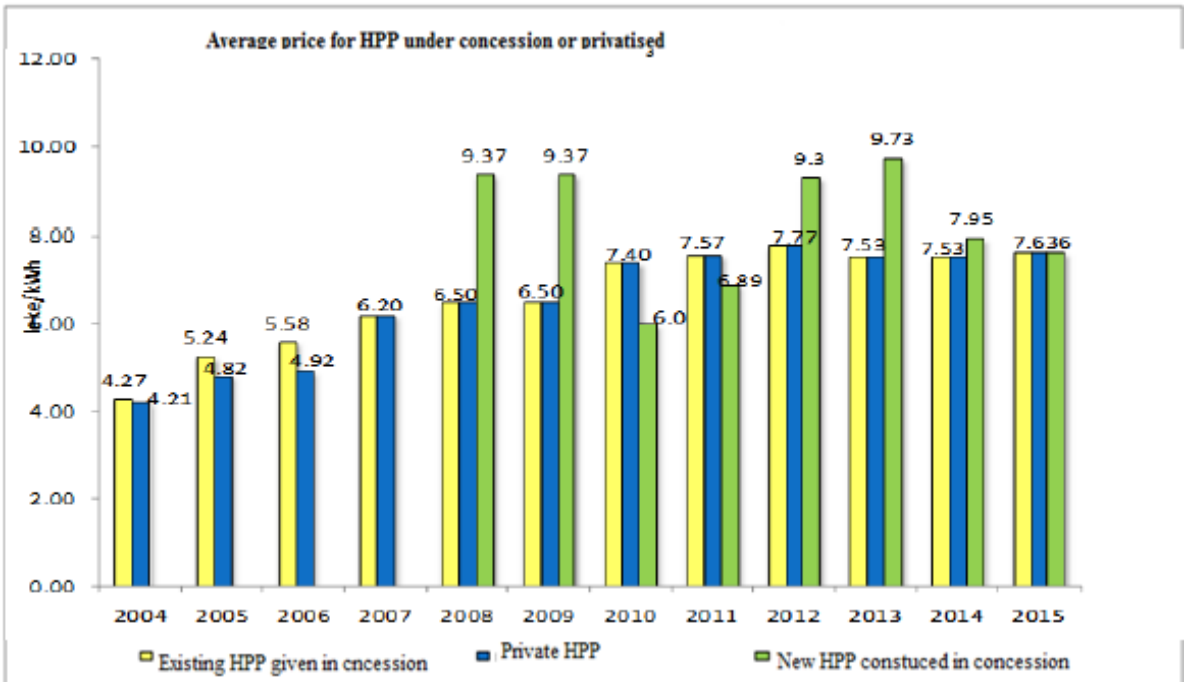
Figure 5.2 Annual revenues for private and small HPPs.



According to Decision no. 161, dated 12.07.2012 of the ERE, prices for new HPPs under concession for 2013 were the same prices as those of 2012 fixed at 9.3 Lek / kWh. Figure 5.2 shows the annual revenues in Lek of the new HPPs Concessions evidencing the sharp increase during 2013 due to the increasing number of new hydropower plants entering into function in these last years.

In the ne following Figure 5.3, there are presented the price evolution for HPP up to 15 MW for the period 2004-2015.

Figure 5.3. Average price for Small concessionary HPPs.



Source: ERE Report 2016.

As we can see in this figure, after the entry in force of the Law on concessions, the first HPP constructed on concession had been setting the tariff since 2008 (the green histogram) and have a regulated price slightly higher from the average price of the other existing plants as an incentive to attract new investors in the energy sector.

At this stage, we have the necessary information to complete our analysis on transaction costs for this last part where HPP companies are now producing electricity and see if transaction costs and other opportunity costs have affected the activity of these firms.

6.2.3 Estimation[70]

First we check the correlation between the involved variables. If we run the correlations between the "planned cost of investment" in Albanian Lek and the "power in Mwh installed" for producing the energy, we would expect a high positive correlation between these two variables. In fact, the Pearson correlation test below shows that the correlation coefficient is 0,938 which is close to 1 and the *p-value* is quite low.

Table 1. Correlation between investment and capacity installed.

Correlations

		Investment in ALL	Power in kW installed
Investment in ALL	Pearson Correlation	1	,938**
	Sig. (2-tailed)		,000
	N	32	32
Power in kW installed	Pearson Correlation	,938**	1
	Sig. (2-tailed)	,000	
	N	32	32

**. Correlation is significant at the 0.01 level (2-tailed).

The same positive correlation result we would expect if we correlate the "power or capacity installed" in the plants with the respective "energy produced" during 2013 for each plant. In this case the correlation coefficient is even higher than the previous one, being equal to 0,944. The results are significant at the 0.01 level with two tailed interval.

[70] For a complete data analysis and tests on normality consult the **Annex** section.

Table 2. Correlation between capacity and energy produced

Correlations

		Power in kW installed	Kwh produced 2013
Power in kW installed	Pearson Correlation	1	,944**
	Sig. (2-tailed)		,000
	N	32	30
Kwh produced 2013	Pearson Correlation	,944**	1
	Sig. (2-tailed)	,000	
	N	30	30

**. Correlation is significant at the 0.01 level (2-tailed).

Another analysis we can make with our data, is to see if there is any correlation between the "power installed" in the plats and the "delays" in production.

Table 3. Correlation between capacity and delays in production

Correlations

		Power in kW installed	Delay Year
Power in kW installed	Pearson Correlation	1	-,171
	Sig. (2-tailed)		,350
	N	32	32
Delay Year	Pearson Correlation	-,171	1
	Sig. (2-tailed)	,350	
	N	32	32

The result is interesting since in this case the correlation is not significant, showing that there is no evidence bigger plants have had higher delays from the deadlines the entrepreneurs have predicted. Another indication from this result is that delays, when they have occurred, have been different from technical since they might have been already predicted in the respective business plans.

This is why, analyzing the "power installed" variable in relation to the "expected time of entry in service", one should expect the same result:

Table 4. Correlation between capacity and predicted time of production

Correlations

		Power in kW installed	Expected Time entry in service
Power in kW installed	Pearson Correlation	1	,292
	Sig. (2-tailed)		,125
	N	32	29
Expected Time entry in service	Pearson Correlation	,292	1
	Sig. (2-tailed)	,125	
	N	29	29

Table 4, shows that there is no correlation between the "power installed" variable and "expected time" of entry in service variable since the correlation test is not significant.

The correlation analysis presented above, finds support in a multiple linear regression model presented as following.

As in Joskow (1987), with the data in disposal, I replicate the following multiple regression function:

$$(1)\ .\ DELAY_i = a_0 + b_1 INVESTMENT_i + b_2 POWER_i + b_3 EXPECTED_i + u_i$$

Where the depended variable "DELAY", stands for the delays expressed in years as the difference between the factual date of entry in service of the plant and the expected time of entry in service, predicted by the entrepreneurs in their proposal, the independent variable "INVESTMENT", is the investment cost for constructing the HPP estimated by the entrepreneurs in their proposal, the independent variable "POWER", is the power in MWh capacity installed in the plant, the independent variable "EXPECTED" is the prediction that entrepreneurs have for finishing the works for the construction of the plant and *Ui* is the error term.

In this model, I check if the dependent variable, "Delay in years" is connected in relation to the other variables (investment costs, power installed and expected time of entry in function) taken as independent variables.

Table 5. Multiple linear regression summary.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,601[a]	,361	,284	1,04147

a. Predictors: (Constant), Power in kW installed, Expected Time entry in service, Investment in ALL

The Adjusted R Square is quite low, reporting that only 28 % of the total variability in delays is explained by the model. The ANOVA table is presented in Table 6.

Table 6. Anova table of multiple regression

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	15,313	3	5,104	4,706	,010[b]
	Residual	27,116	25	1,085		
	Total	42,429	28			

a. Dependent Variable: Delay Year

b. Predictors: (Constant), Power in kW installed, Expected Time entry in service, Investment in ALL

The model fails to reject the null hypothesis at 0.01 level of significance, since the p-value is just 0,01.

The coefficient table beneath, confirms my findings:

Table 7. Table of coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,303	,479		6,898	,000
	Investment in ALL	6,020E-010	,000	,381	,840	,409
	Expected Time entry in service	-,977	,266	-,618	-3,669	,001
	Power in kW installed	-1,297E-005	,000	-,061	-,136	,893

a. Dependent Variable: Delay Year

In Table 7, the Beta coefficients of the "Investment" and "Power" variable are not significant since their respective p-value is higher than 0.05 so these variables have no explanatory power and can be both zero.

The final result of this analysis is that *delays* seem not to be connected with the cost of investment nor with the size of the power installed to produce electricity. The only significant variable is the "Expected time" of entry in service variable, which has a negative coefficient, showing that the dependent variable, Delays, on average will decrease as the *Expected* time of entry in service increases. In fact, regressing only this variable, we get the following results:

Table 8. Bivariable Regression model.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,516[a]	,266	,239	1,07378

a. Predictors: (Constant), Expected Time entry in service

Table 9. Anova table for the bivariable regression model

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11,298	1	11,298	9,799	,004[b]
	Residual	31,131	27	1,153		
	Total	42,429	28			

a. Dependent Variable: Delay Year

b. Predictors: (Constant), Expected Time entry in service

Table 10. Table of coefficients for the bivariable regression model

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,320	,483		6,880	,000
	Expected Time entry in service	-,815	,260	-,516	-3,130	,004

a. Dependent Variable: Delay Year

Tables 8,9 and 10, Show that *F* and *t*- tests are significant even though R Square remains still low (24%), proving that our dependent variable, Delays, is explained by other variables that are not included in the model.

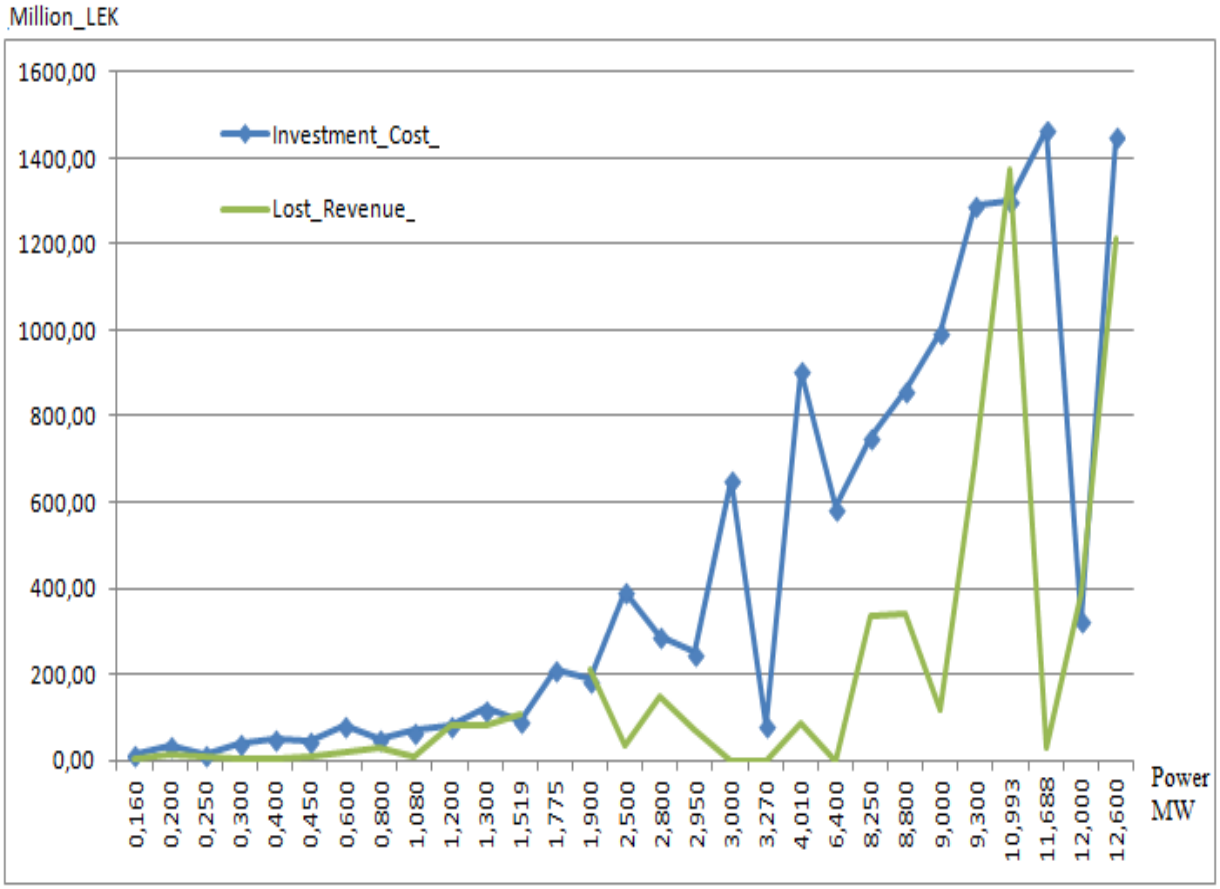
Delays in construction might come from legal disputes with other firms participating in the bidding process, temporary financial difficulties, regulation, bureaucracy, corruption, expropriation procedures and other factors difficult to be quantified or verified for each case.

Considering the singular delays for each investment (when it is present and can be identified), computed as the difference between the actual date of starting producing electricity and the expected time of entry in production forecasted by the entrepreneur in his constructing proposal and referring to the average price of electricity presented in Figure 6.3 (9,3 Lek/kwh) and the yearly production of electricity of each Hydro Power plant during the year 2013, it is easy to compute the loss in revenues for each concession due to delays in starting producing and selling electricity in delay and thus having less time in disposal form the concessionary license.

The following Figure 6.1, presents the investment costs of constructing the hydro power plants in million Lek and the potential loss in revenues due to delays in million Lek on

the vertical axes and the respective power of the plant in MW on the horizontal axes. It is clear from this figure that both lines follow a similar trend and in many cases, the potential loss of revenues equals the investment for constructing the plant (the points where both lines intercept).

Figure 5.2.1 Loss in revenues due to delays.



Source: Author calculations.

Note that in Figure 5.2.1 some data about the potential loss in the revenues are missing since it was not possible to find the correct date of production or, there was no evidence of delays from the estimated period of entry in production of the plant. Note also that in the chart above there are presented small and medium hydro power plants (up to 12.6 MW).

5.3. Chapter conclusions

In this chapter, the analysis is focused on estimating transaction costs on already finished and working hydropower plants under concession. Due to the specificity of these investments and different technology used, it is difficult to derive general conclusions, but all these investments have to meet the same legal obligations and follow the same procedures.

While competing for the concession right, bidding firms face many transaction costs like: pre- feasibility studies, bidding insurance forms, notary costs and other fees for lawyer's or technical assistance.

The evaluation process might exceed the legal period of announcing the winner in some cases due to technical problems and legal disputes but in general concession's permits are granted within the legal terms.

The contract negotiation process requires further conditions that the winning firm must meet, (e.g. the contract insurance form) adding other costs to this initiative. The monetary costs deriving from these procedures are considerable but still a little fraction (1-2%) if compared to the total investment cost of constructing the hydropower plant.

Opportunity costs instead, arising when there are delays in constructing and thus in producing electricity, shortening the licensing period of the concession, can reach a considerable amount. In some cases, referring to Figure 5.1, they equal the entire investment.

The final result of this analysis is that delays seems to be not connected with the cost of investment or with the size of the power installed to produce electricity and that there is no difference between the Average Cost / MW of construction the HPP as a concession and the Average Cost /MW of purchasing the HPP in privatization procedure, thus the success or the failure in the implementation of concession contracts depends directly from the other component of total costs of exchange: the costs of transaction.

Entrepreneurs seem to correctly predict the investment costs of constructing the HHP in relation to the power in MWh installed (table 1 of correlations) but they fail to correctly predict the expected time their investment would be completed, this independently from the size of the HPP plant. This time lag created as the difference between the actual date of starting producing and the one predicted by the entrepreneur, increases the opportunity costs and the transaction costs. I suppose it is the existence of these costs that influence the most the "make or buy" decision of the entrepreneurs while considering the process of constructing new HPPs rather than buying existing ones. This practically proves the hypothesis that there exists a significant difference between getting a concessionary license for construction a new hydropower plant and buying / privatizing an existing one.

When high transaction costs are responsible for considerable delays in construction, there can be situations where getting the concessionary license turns out in an investment failure. Delays in construction might come from legal disputes with other firms participating in the bidding process, temporary financial difficulties, regulation, bureaucracy, corruption, brokers, expropriation procedures and other factors difficult to be quantified or verified for each case.

Reducing transaction costs by reducing bureaucracy and tariffs, promoting the ease of doing business, avoiding bottlenecks and providing the firms with licenses and permits in less time, would affect positively the success of the new investments, a better allocation of the resources and would have a pro-growth impact on the county's economic perspective.

CONCLUSIONS AND RECOMMENDATIONS

This study aims to analyze the impact of transaction costs occurred on the path of interactions between firms and Public Authority. In the focus are the new hydropower plant firms which have applied for the bidding procedure right after the introduction of the Law No. 9663, "On Concessions", by the late of 2006 and are operating under concession license of 35 years.

I try to give a complete view of the procedures followed for granting HHP concession agreements in relation to the regulation compliances by the new concessionaire firms. The aim of the case study in the last chapter, is to achieve a quantitative impact of the transaction cost (regulation) due to these interactions of the firms with the Contracting Authority, expressed in percentage terms on the total investment cost or in days of delay due to administrative procedures.

The first chapter provide the theoretical underpinning of transaction costs: their nature, typology, use and implications. The second chapter contains a general overview of hydro power plant concessions that are already operating in Albania and the regulated Albanian market model, analyzing the impact of these reform in the energy sector.

In the third chapter, there are presented the main pre-contractual phases for organizing, launching and evaluating the bidding procedures for granting the hydro power plant concessions according to the regulation in force in Albania.

There are presented the starting procedures for both solicited and unsolicited concessionary proposals, while emphasizing that bidders not only have to bear the cost

of the insurance form of their proposal worth 2% of the investment value and also have to provide: technical certificates; certificates for successfully concluded engineering civil works; documents proving works in similar concessions; professional licenses and qualifications of the working staff. Statistically recorded data shows that the average time lag between the publication of the call for proposals and the effective date of proposals submitting is nearly 60 days.

In the fourth chapter, there are presented the final post-contractual stages of granting the concessionary agreement: contract negotiation and post- contractual monitoring. It describes that prior to the signing of the contract the winning bidder should submit to the Contracting Authority a contract insurance form worth up to 10 % of the value of the project or service, if the installed power is less than 15 MW, 7% if the installed power is between 15 and 30 MW and 5 % for projects where the installed power is higher than 30 MW, leading to high opportunity costs by blocking considerable financial resources for long period of time. In this chapter there are presented the high costs expressed in days of waiting for getting various permits, especially dealing with construction permit it takes, on average, 331 days. In relation to the monitoring phase, there are presented data regarding 16 concessionary agreements that are penalized by the Contracting Authority and where the mean incidence of the fee is approximately 0.6 % of the investment cost.

In the last chapter, the analysis is focused on estimating transaction costs on already finished and working hydropower plants under concession. Due to the specificity of these investments and different technology used, it is difficult to derive general conclusions, but all these investments have to meet the same legal obligations and follow the same procedures.

Considering all cost related to procedural stages presented previously, the firms competing for the concession right, face many other transaction costs like: pre-feasibility studies, bidding insurance forms, notary costs and other fees of lawyer's and technical assistance. The monetary costs deriving from these procedures are roughly calculated in the practice by entrepreneurs to be approximately 1-2% if compared to the total investment cost of constructing the hydropower plant.

Opportunity costs instead, related to delays in constructing and in producing electricity, can reach a considerable amount if compared to the total investment cost. In some cases, referring to Figure 5.1, they equal the entire investment cost.

The findings of this analysis are that delays seems not to be connected with the cost of investment or with the size of the power capacity installed to produce electricity and that there is no difference between the Average Cost per MW in constructing the HPP as a concession and the Average purchasing cost per MW of the HPP in privatization procedure, thus the success or the failure in the implementation of concession contracts depends directly from the other component of total costs of exchange: the costs of transaction.

Entrepreneurs, on the other side, seem to correctly predict the investment costs of constructing the HHP in relation to the power capacity in MWh installed (table 1 of correlations) but they fail to correctly predict the "predicted" time their investment would be completed, this independently from the size of the HPP plant. This time lag created as the difference between the factual date of starting producing and the one predicted by the entrepreneur, increases the opportunity costs and the transaction costs. I suppose it is the existence of these costs that influence the most the "make or buy"

decision of the entrepreneurs while considering the process of constructing new HPPs or buying existing ones. This practically proves the hypothesis that there exists a significant difference between getting a concessionary license for construction a new hydropower plant and buying / privatizing an existing one.

When high transaction costs are responsible for considerable delays in construction, there can be situations where getting the concessionary license turns out in an investment failure. Delays in construction might come from legal disputes with other firms participating in the bidding process, temporary financial difficulties, regulation, bureaucracy, corruption, intermediaries, expropriation procedures and other factors difficult to be quantified or verified for each case.

Reducing transaction costs by reducing bureaucracy and tariffs, promoting the ease of doing business, avoiding bottlenecks and providing the firms with licenses and permits in less time, would affect positively the success of the new investments, a better allocation of the resources and would have a pro-growth impact on the county's economic perspective.

The approach used for describing the costs of interaction with the Contracting Authority as part of the Public Sector in this research is basically indirect, mostly represented by procedural delays, contractual fees and other regulatory compliances. A more direct methodology like questionnaires may answer to the remaining two categories of costs of dealing with Public Administration: burdens deriving from public regulation for issues like environmental protection, social insurance taxes, hygiene expenses for the working place, expenses deriving from legal disputes with Public Administration and so on.

Some policy recommendations derived from this study are as following:

- In the case of small hydropower plants (e.g. less than 1 MWh capacity), a deeper analysis should be carried out, not just in economical terms of energy production, but also its impact in terms of environment, in tourism, agriculture and so on. In this case a comparable analysis between different sources of energy should be employed, e.g wind turbines, panel solar, biomass etc.
- For medium hydropower plants, as in the case of some bigger hydropower plants, governmental solicit procedure might be a better solution than different private firms applying with different projects for starting the same procedure. This would guarantee the economic and social importance of the investment, and would be time and resource saving for the private firms.
- A further liberalization of the energy market, by reducing monopoly power for the distribution and transmission operator.
- A more active role of the regulating agency for a more stable and transparent policy in relation to wholesale and retail tariffs.

The Albanian Parliament, on 25 April 2013, replaced the Law nr. 9663 "On concessions" with the Law no. 125/2013 "*On Concessions and Public-Private Partnership*" making some corrections and further specifications not included in the previous law. Nevertheless, Article 48 of the latest Law specifies "The articles of Law No. 9663, dated 18.12.2006, "*On concessions*", as amended, apply to the procedures for granting concession contracts and ongoing procedures, and to contracts concluded before the entry into force of this law", considering the Law nr. 9663 the main reference for the period taken into analysis in this dissertation. Recent developments consider some amendments to the current law by reducing the time for issuing permits for

concessions from the present 272 days, into 150 days and a further simplification of the procedures requested.

Limitations:

I tried to give a complete description of the regulatory and administrative procedures concerning the granting of concessionary rights but unfortunately the accuracy of the data in disposal is not as complete as the theoretical description I tried to give. It is a process still running so further studies might be following in the light of new data in disposal and new concessions under implementation. Estimating transaction costs is problematic because production and transaction costs are jointly determined, leading to formidable difficulties in estimating transaction costs separately. Furthermore, the data used in my case study are data recorded by the Contracting Authority and reports from regulating or monitoring agencies (ERE, AKBN; KLSH). It would be more appropriate for a direct measuring of transaction costs arising from the interaction with Public Administration to use questionnaires, contacting directly the firms operating in this sector, for a better quantification on these costs. Unfortunately, contacting directly is either costly due to the spread of these concessions in remote places throughout the country, or sometimes impossible to identify the original investor since in many cases these projects were carried out by *joint ventures* and other types of contract agreements between investing firms and the granted concessionary license was also transferred to other firms different from the original ones. In order to overcome this difficulty, a specific investment for a medium hydropower plant is brought as an example to separate total costs in different sub costs.

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ANNEXES

Tables:

Correlations

Correlations

		Investment in ALL	Power in kW installed
Investment in ALL	Pearson Correlation	1	,938**
	Sig. (2-tailed)		,000
	N	32	32
Power in kW installed	Pearson Correlation	,938**	1
	Sig. (2-tailed)	,000	
	N	32	32

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

Correlations

		Power in kW installed	Kwh produced 2013
Power in kW installed	Pearson Correlation	1	,944**
	Sig. (2-tailed)		,000
	N	32	30
Kwh produced 2013	Pearson Correlation	,944**	1
	Sig. (2-tailed)	,000	
	N	30	30

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		Power in kW installed	Delay Year
Power in kW installed	Pearson Correlation	1	-,171
	Sig. (2-tailed)		,350
	N	32	32
Delay Year	Pearson Correlation	-,171	1
	Sig. (2-tailed)	,350	
	N	32	32

Correlations

Correlations

		Power in kW installed	Expected Time entry in service
Power in kW installed	Pearson Correlation	1	,292
	Sig. (2-tailed)		,125
	N	32	29
Expected Time entry in service	Pearson Correlation	,292	1
	Sig. (2-tailed)	,125	
	N	29	29

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Lost Revenues from delays based on 2013 Production * Investment in ALL	30	93,8%	2	6,2%	32	100,0%
Lost Revenues from delays based on 2013 Production * Delay Year	30	93,8%	2	6,2%	32	100,0%
Lost Revenues from delays based on 2013 Production * Expected Time entry in service	27	84,4%	5	15,6%	32	100,0%

Lost Revenues from delays based on 2013 Production * Investment in ALL

Lost Revenues from delays based on 2013 Production

Investment in ALL	Mean	N	Std. Deviation
12500000	6330963,00	1	.
15300000	3925653,00	1	.
35456000	11211144,00	1	.
39000000	4424565,00	1	.
46315030	6890291,00	1	.
50419481	28053635,00	1	.
51955070	5283532,00	1	.
69026908	6756766,00	1	.
79700000	17099318,00	1	.
83097322	,00	1	.
83500000	80475371,00	1	.
92422100	109141744,00	1	.
120000000	83555220,00	1	.
188055946	208779464,00	1	.
250000000	69609620,00	1	.
287310000	147180032,00	1	.
325800167	386191286,00	1	.
392862289	35140013,00	1	.
587975273	,00	1	.
650565750	,00	1	.
749080000	333222374,00	1	.

857861985	338943316,00	1	.
907956000	84347170,00	1	.
995034550	116828792,00	1	.
1290117487	693649977,00	1	.
1300177500	1375594469,00	1	.
1453500000	1213488492,00	1	.
1465039743	27918039,00	1	.
3565744707	776993558,00	1	.
19520000000	,00	1	.
Total	205701160,13	30	355983485,109

Lost Revenues from delays based on 2013 Production * Delay Year

Lost Revenues from delays based on 2013 Production

Delay Year	Mean	N	Std. Deviation
,00	,00	4	,000
,58	84347170,00	1	.
,66	69609620,00	1	.
,70	3925653,00	1	.
,80	35140013,00	1	.
,82	27918039,00	1	.
,92	116828792,00	1	.
,95	4424565,00	1	.
1,04	386191286,00	1	.
1,75	28053635,00	1	.

1,87	208779464,00	1	.
1,98	693649977,00	1	.
1,99	6756766,00	1	.
2,19	6330963,00	1	.
2,36	776993558,00	1	.
2,39	5283532,00	1	.
2,63	60176444,00	2	69247391,346
2,68	80475371,00	1	.
2,78	1375594469,00	1	.
2,84	17099318,00	1	.
2,92	338943316,00	1	.
2,93	147180032,00	1	.
2,97	6890291,00	1	.
3,02	1213488492,00	1	.
3,16	83555220,00	1	.
3,40	333222374,00	1	.
Total	205701160,13	30	355983485,109

Lost Revenues from delays based on 2013 Production * Expected Time entry in service

Lost Revenues from delays based on 2013 Production

Expected Time entry in service	Mean	N	Std. Deviation
,50	11211144,00	1	.
,66	4424565,00	1	.
,75	109141744,00	1	.
,83	5407972,00	2	2096315,634
1,00	34635217,33	3	40062190,822
1,16	83555220,00	1	.
1,25	264914740,67	3	170781030,229
1,50	609386012,00	2	854329920,279
1,66	1375594469,00	1	.
1,91	776993558,00	1	.
2,00	264091559,75	4	298590780,814
2,50	42173585,00	2	59642455,881
2,66	27918039,00	1	.
3,00	50656268,33	3	59940030,820
3,08	,00	1	.
Total	215176251,67	27	371195871,438

Means

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Lost Revenues from delays based on 2013 Production * Investment in ALL	30	93,8%	2	6,2%	32	100,0%

Report

Lost Revenues from delays based on 2013 Production

Investment in ALL	Mean	N	Std. Deviation
12500000	6330963,00	1	.
15300000	3925653,00	1	.
35456000	11211144,00	1	.
39000000	4424565,00	1	.
46315030	6890291,00	1	.
50419481	28053635,00	1	.
51955070	5283532,00	1	.
69026908	6756766,00	1	.
79700000	17099318,00	1	.
83097322	,00	1	.

83500000	80475371,00	1	.
92422100	109141744,00	1	.
120000000	83555220,00	1	.
188055946	208779464,00	1	.
250000000	69609620,00	1	.
287310000	147180032,00	1	.
325800167	386191286,00	1	.
392862289	35140013,00	1	.
587975273	,00	1	.
650565750	,00	1	.
749080000	333222374,00	1	.
857861985	338943316,00	1	.
907956000	84347170,00	1	.
995034550	116828792,00	1	.
1290117487	693649977,00	1	.
1300177500	1375594469,00	1	.
1453500000	1213488492,00	1	.
1465039743	27918039,00	1	.
3565744707	776993558,00	1	.
19520000000	,00	1	.
Total	205701160,13	30	355983485,109

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Expected Time entry in service, Investment in ALL[b]	.	Enter

a. Dependent Variable: Delay Year

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,600[a]	,360	,311	1,02162

a. Predictors: (Constant), Expected Time entry in service, Investment in ALL

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15,293	2	7,646	7,326	,003[b]
	Residual	27,137	26	1,044		
	Total	42,429	28			

a. Dependent Variable: Delay Year

b. Predictors: (Constant), Expected Time entry in service, Investment in ALL

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	3,290	,459		7,160
	Investment in ALL	5,114E-010	,000	,323	1,956
	Expected Time entry in service	-,976	,261	-,618	-3,739

Coefficients[a]

Model		Sig.
1	(Constant)	,000
	Investment in ALL	,061
	Expected Time entry in service	,001

a. Dependent Variable: Delay Year

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Power in kW installed, Expected Time entry in service, Investment in ALL[b]	.	Enter

a. Dependent Variable: Delay Year

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,601[a]	,361	,284	1,04147

a. Predictors: (Constant), Power in kW installed, Expected Time entry in service, Investment in ALL

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15,313	3	5,104	4,706	,010[b]
	Residual	27,116	25	1,085		
	Total	42,429	28			

a. Dependent Variable: Delay Year

b. Predictors: (Constant), Power in kW installed, Expected Time entry in service, Investment in ALL

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	3,303	,479		6,898
	Investment in ALL	6,020E-010	,000	,381	,840
	Expected Time entry in service	-,977	,266	-,618	-3,669
	Power in kW installed	-1,297E-005	,000	-,061	-,136

Coefficients[a]

Model		Sig.
1	(Constant)	,000
	Investment in ALL	,409
	Expected Time entry in service	,001
	Power in kW installed	,893

a. Dependent Variable: Delay Year

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Expected Time entry in service[b]	.	Enter

a. Dependent Variable: Delay Year

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,516[a]	,266	,239	1,07378

a. Predictors: (Constant), Expected Time entry in service

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11,298	1	11,298	9,799	,004[b]
	Residual	31,131	27	1,153		
	Total	42,429	28			

a. Dependent Variable: Delay Year

b. Predictors: (Constant), Expected Time entry in service

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	3,320	,483		6,880
	Expected Time entry in service	-,815	,260	-,516	-3,130

Coefficients[a]

Model		Sig.
1	(Constant)	,000
	Expected Time entry in service	,004

a. Dependent Variable: Delay Year

NORMALITY

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Expected Time entry in service	29	90,6%	3	9,4%	32	100,0%
Delay Year	29	90,6%	3	9,4%	32	100,0%
Power in kW installed	29	90,6%	3	9,4%	32	100,0%
Investment in ALL	29	90,6%	3	9,4%	32	100,0%

Descriptives

			Statistic
Expected Time entry in service	Mean		1,6879
	95% Confidence Interval for Mean	Lower Bound	1,3915
		Upper Bound	1,9844
	5% Trimmed Mean		1,6752
	Median		1,5000
	Variance		,607
	Std. Deviation		,77933
	Minimum		,50
	Maximum		3,08
	Range		2,58
	Interquartile Range		1,25
	Skewness		,434
	Kurtosis		-,917
Delay Year	Mean		1,9445
	95% Confidence Interval for	Lower Bound	1,4762

	Mean	Upper Bound	2,4127
	5% Trimmed Mean		1,9110
	Median		2,1900
	Variance		1,515
	Std. Deviation		1,23099
	Minimum		,00
	Maximum		4,82
	Range		4,82
	Interquartile Range		2,07
	Skewness		,081
	Kurtosis		-,552
Power in kW installed	Mean		5134,66
	95% Confidence Interval for Mean	Lower Bound	2925,33
		Upper Bound	7343,98
	5% Trimmed Mean		4521,26
	Median		2800,00
	Variance		33735273,234
	Std. Deviation		5808,207
	Minimum		160
	Maximum		24260
	Range		24100

Descriptives

			Std. Error
Expected Time entry in service	Mean		,14472
	95% Confidence Interval for Mean	Lower Bound	
		Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		,434
	Kurtosis		,845

	Mean		,22859
	95% Confidence Interval for Mean	Lower Bound	
		Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
Delay Year	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		,434
	Kurtosis		,845
	Mean		1078,557
	95% Confidence Interval for Mean	Lower Bound	
		Upper Bound	
	5% Trimmed Mean		
	Median		
Power in kW installed	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		

Descriptives

			Statistic
Power in kW installed	Interquartile Range		8310
	Skewness		1,568
	Kurtosis		2,662
	Mean		592101043,72
	95% Confidence Interval for Mean	Lower Bound	296027114,46
		Upper Bound	888174972,99
	5% Trimmed Mean		490954274,37
	Median		250000000,00
	Variance		6058509175236 17280,000
	Std. Deviation		778364257,609
	Minimum		12500000
	Maximum		4E+009
	Range		3553244707
	Interquartile Range		877131821
	Skewness		2,261
	Kurtosis		6,598
Investment in ALL			

Descriptives

			Std. Error
Power in kW installed	Interquartile Range		
	Skewness		,434
	Kurtosis		,845
	Mean		144538614,042
	95% Confidence Interval for Mean	Lower Bound	
		Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
Investment in ALL	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		,434
	Kurtosis		,845

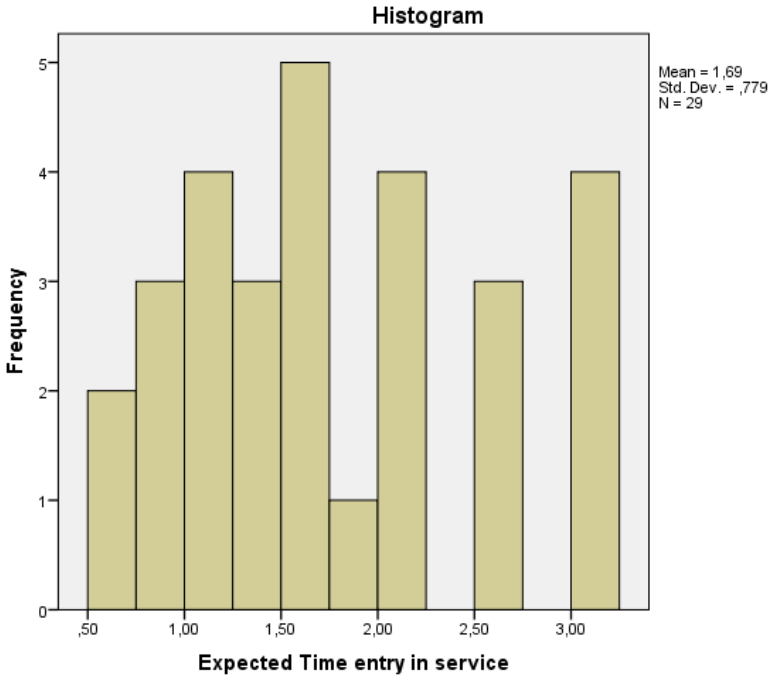
Tests of Normality

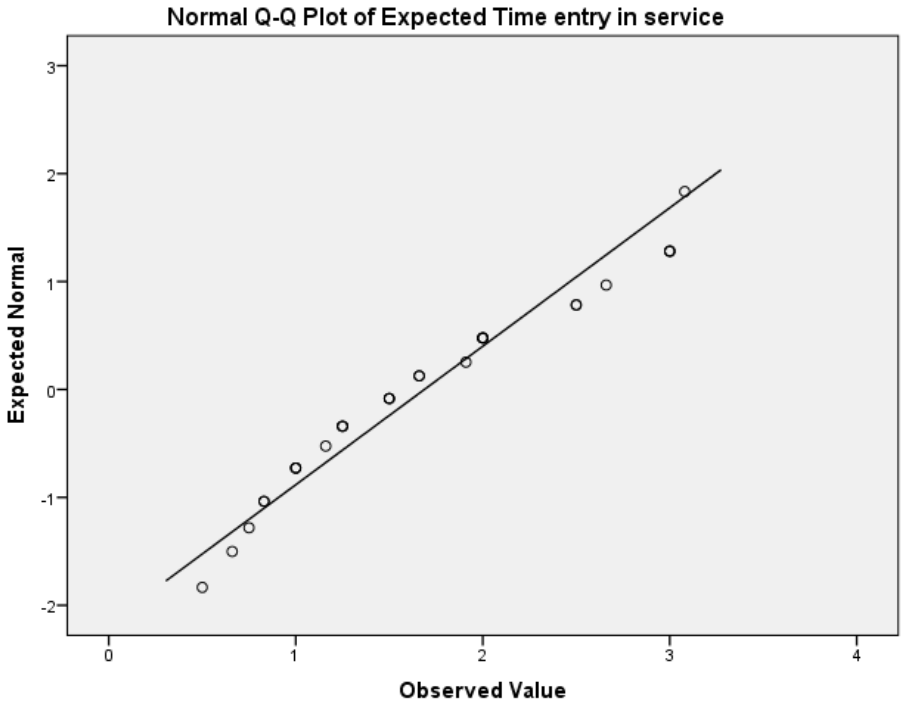
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Expected Time entry in service	,127	29	,200*	,934	29	,069
Delay Year	,148	29	,104	,941	29	,108
Power in kW installed	,247	29	,000	,801	29	,000
Investment in ALL	,228	29	,000	,730	29	,000

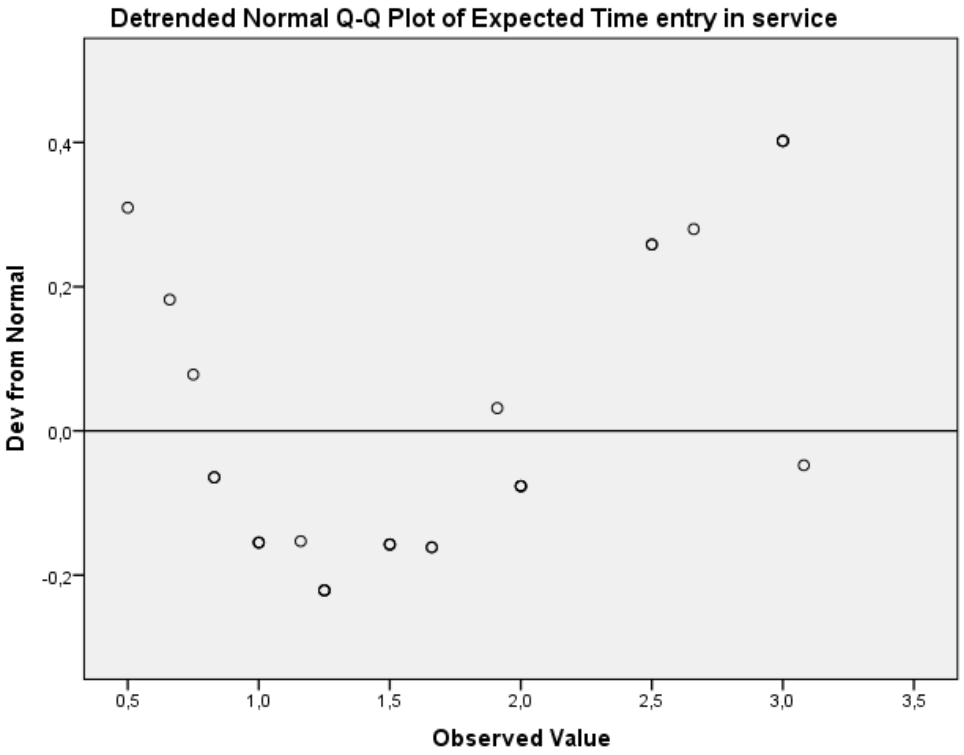
*. This is a lower bound of the true significance.

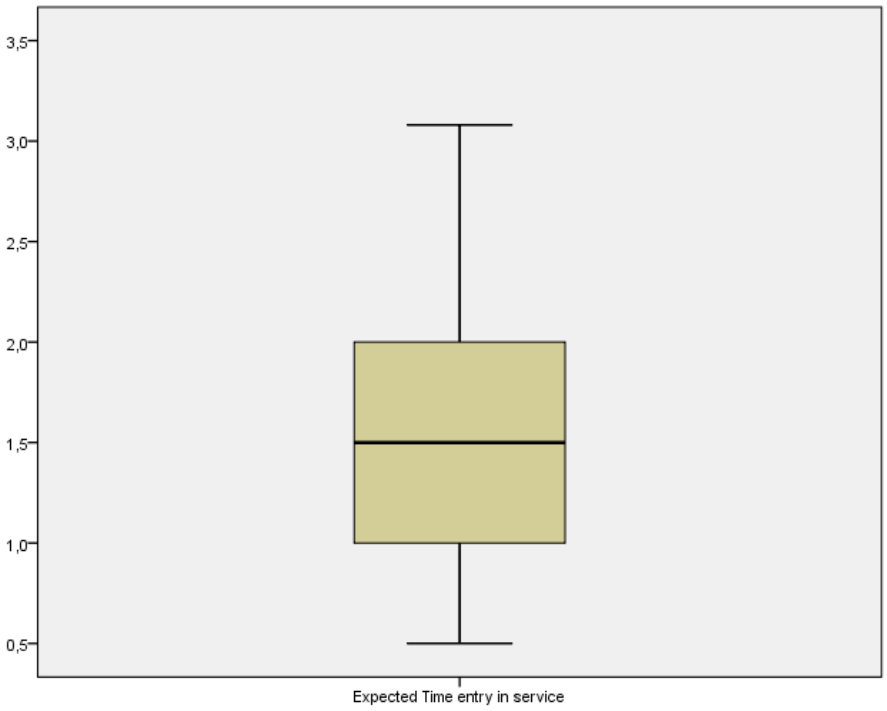
a. Lilliefors Significance Correction

Expected Time entry in service

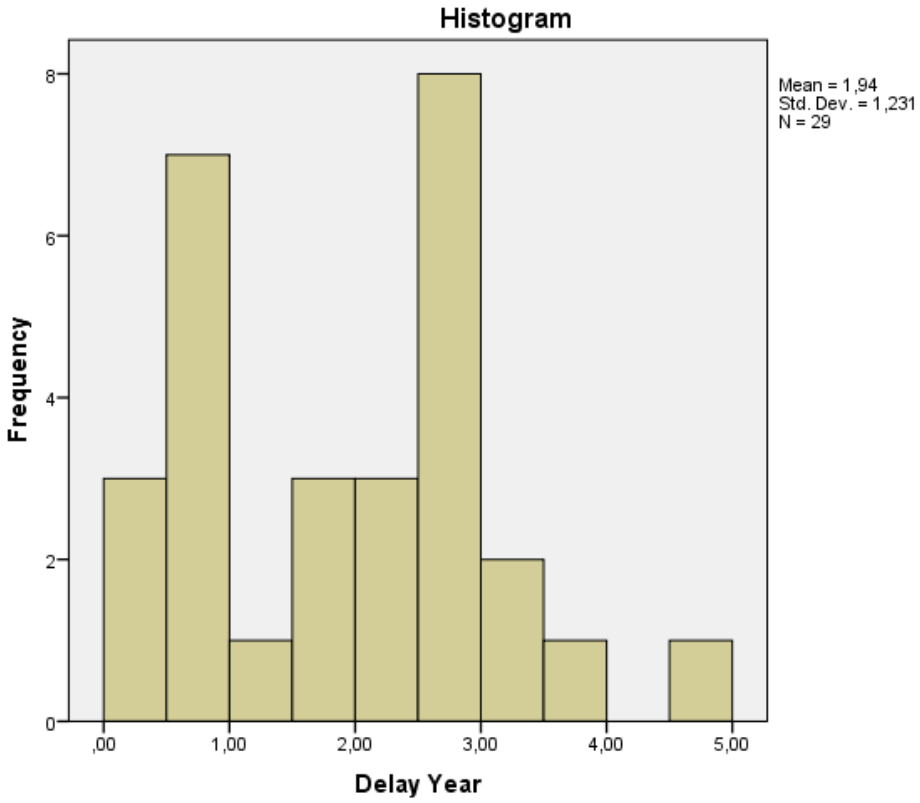


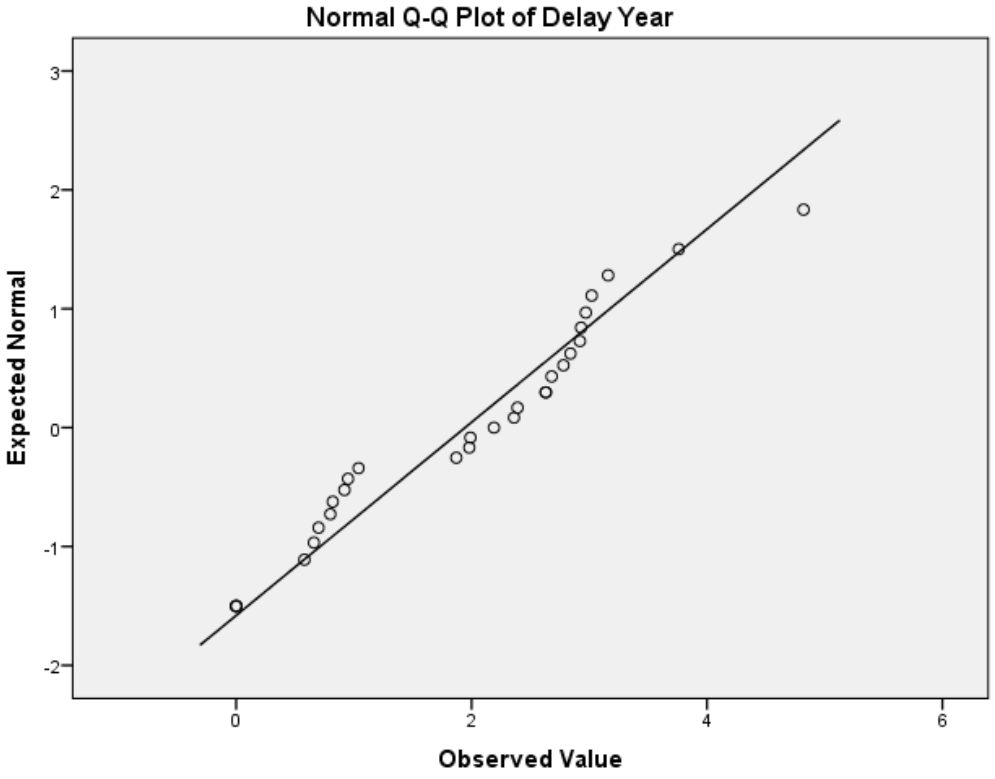


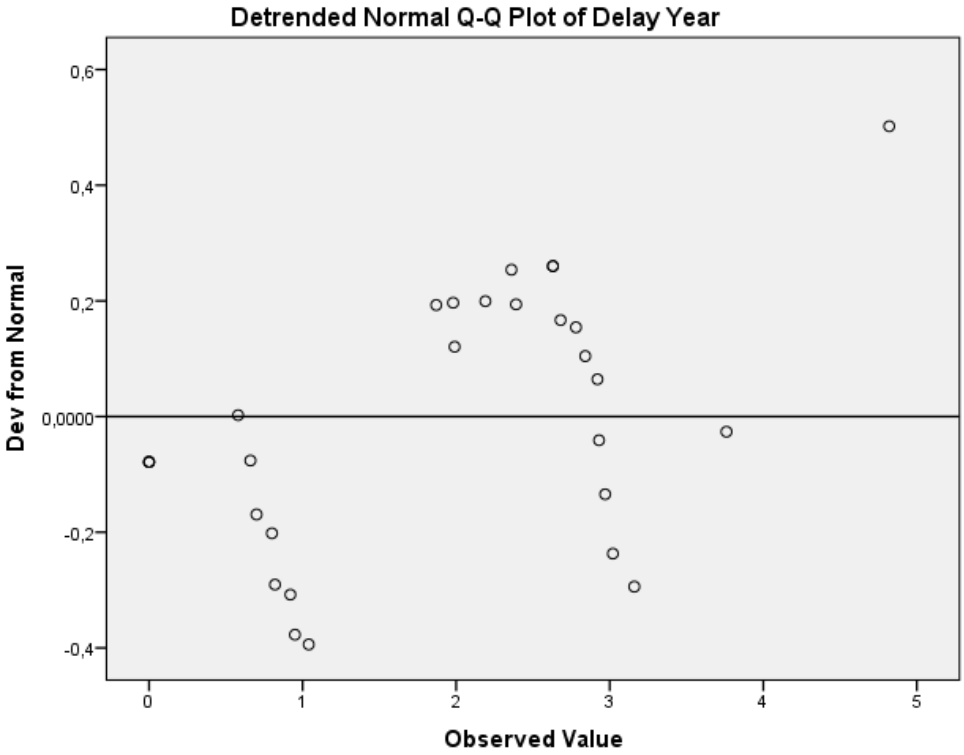

Detrended Normal Q-Q Plot of Expected Time entry in service
Dev from Normal
0,4
0,2
0,0
-0,2
0,5
1,0
1,5
2,0
2,5
3,0
3,5
Observed Value

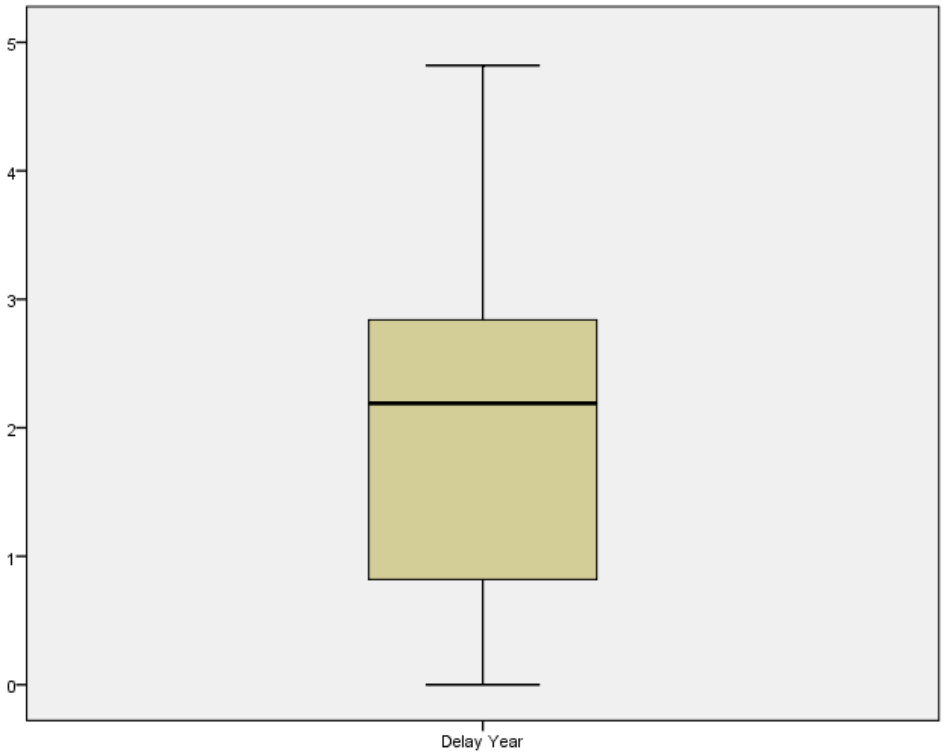

3,5
3,0
2,5
2,0
1,5
1,0
0,5
Expected Time entry in service

Delay Year

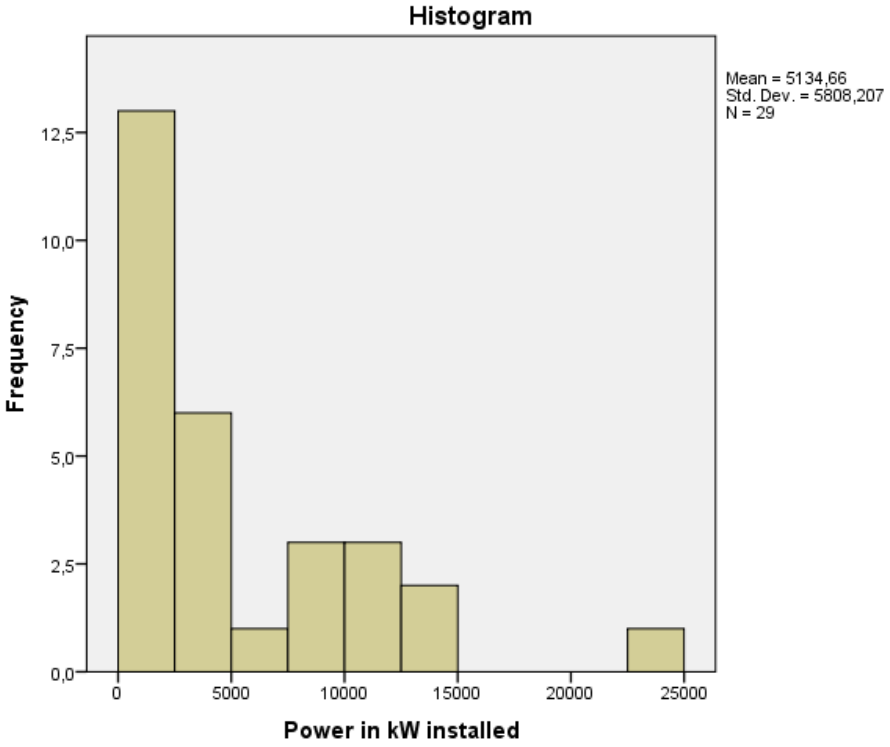

Histogram
Mean = 1,94
Std. Dev. = 1,231
N = 29
Frequency
Delay Year
0
2
4
6
8
,00
1,00
2,00
3,00
4,00
5,00

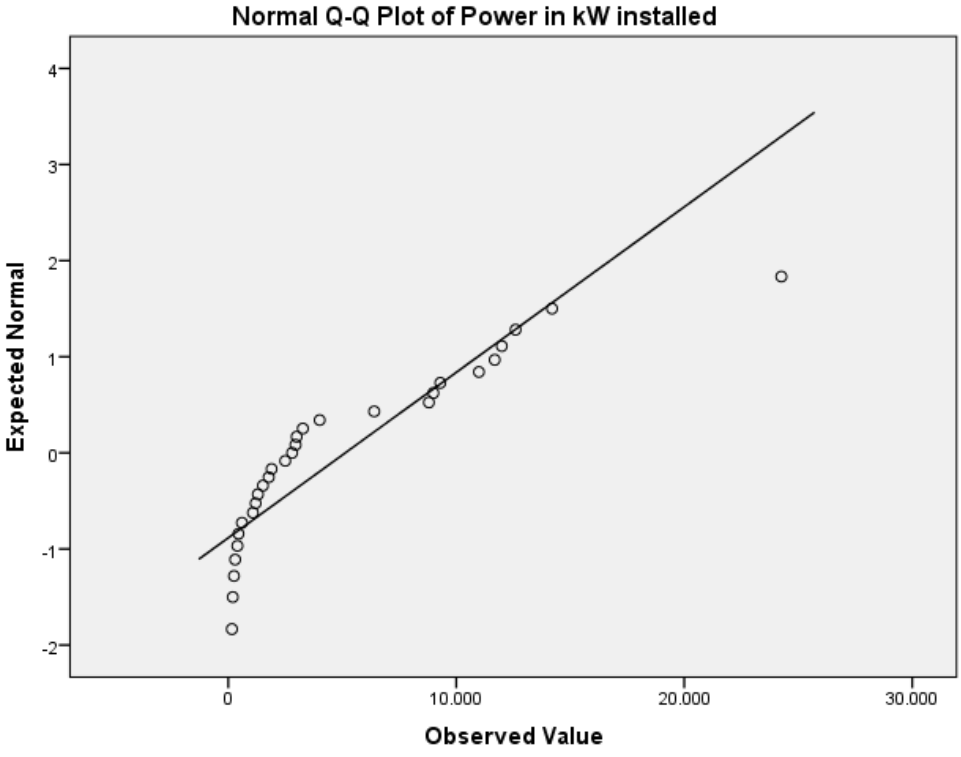

Normal Q-Q Plot of Delay Year
Expected Normal
Observed Value
-2
-1
0
1
2
3
0
2
4
6

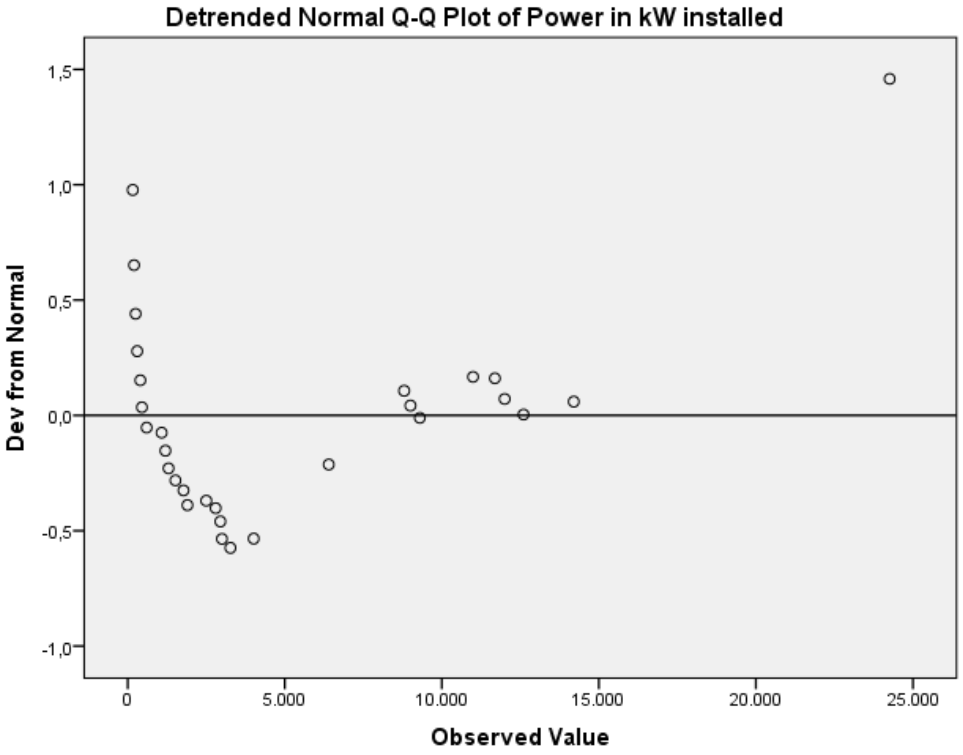

Detrended Normal Q-Q Plot of Delay Year
Dev from Normal
0,6
0,4
0,2
0,0000
-0,2
-0,4
0
1
2
3
4
5
Observed Value

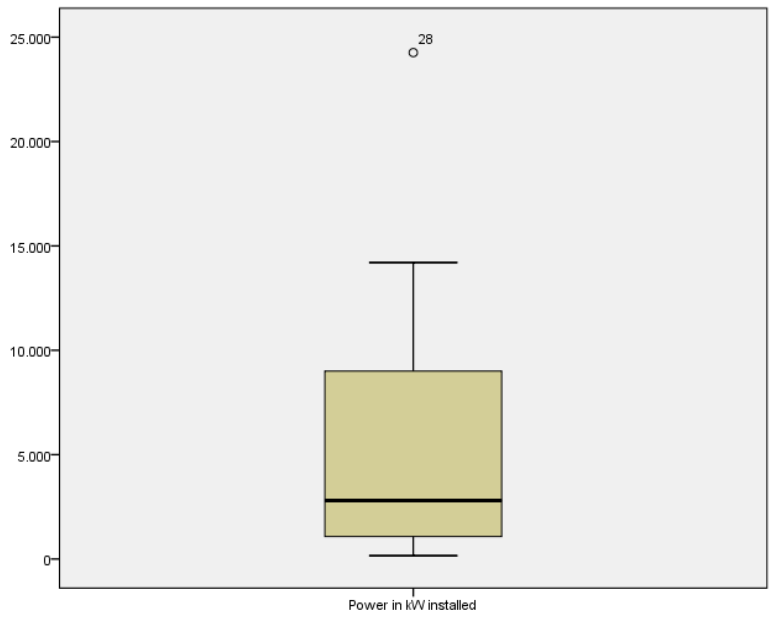

5
4
3
2
1
0
Delay Year

Power in kW installed

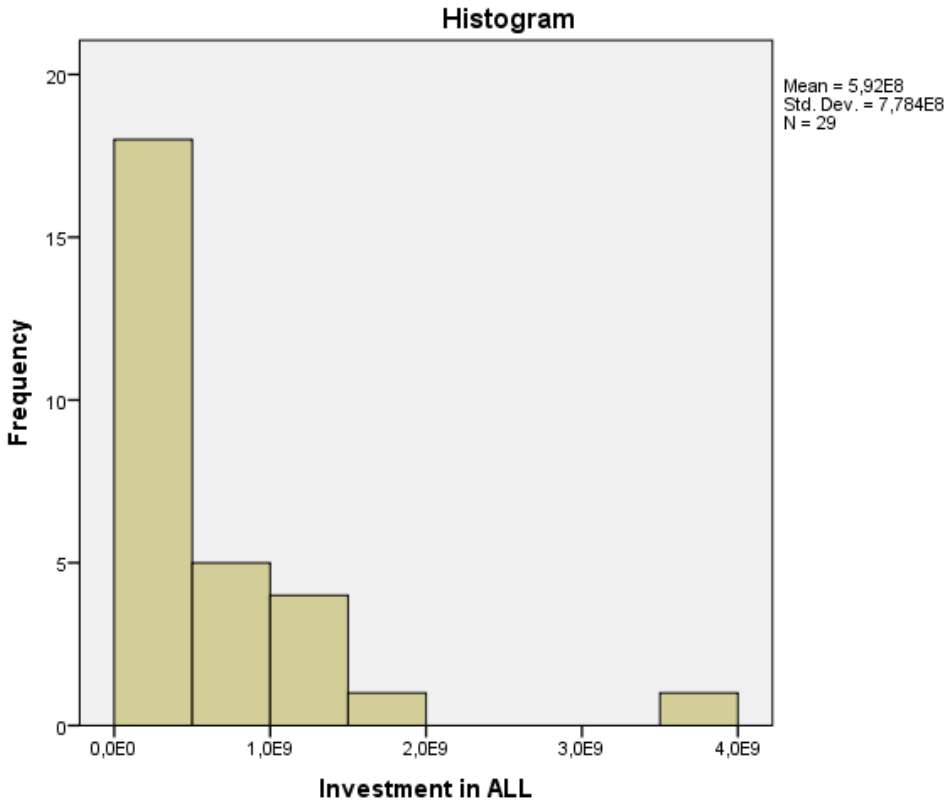


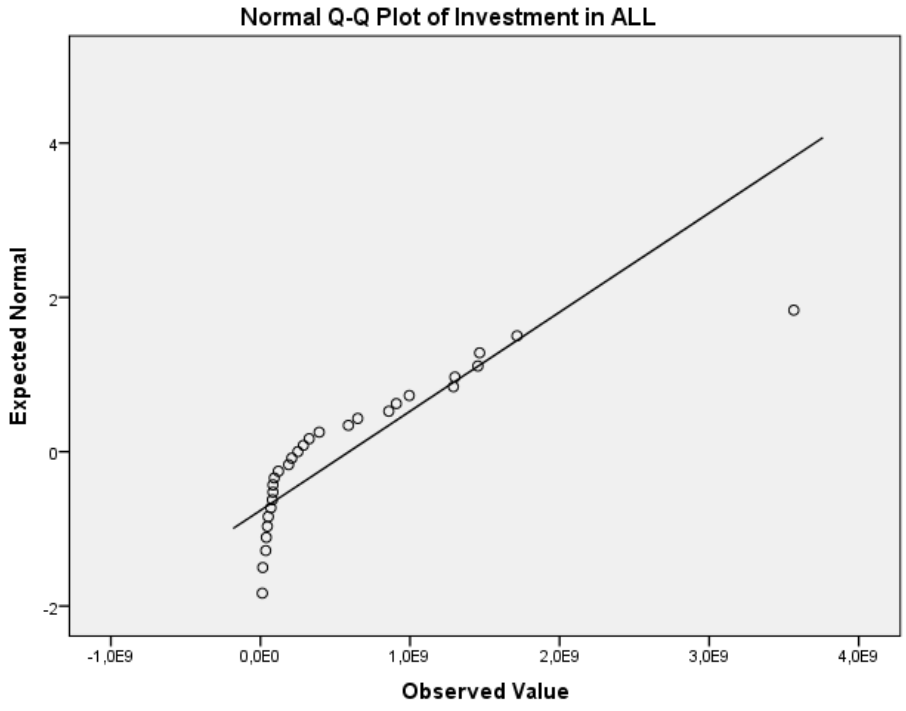


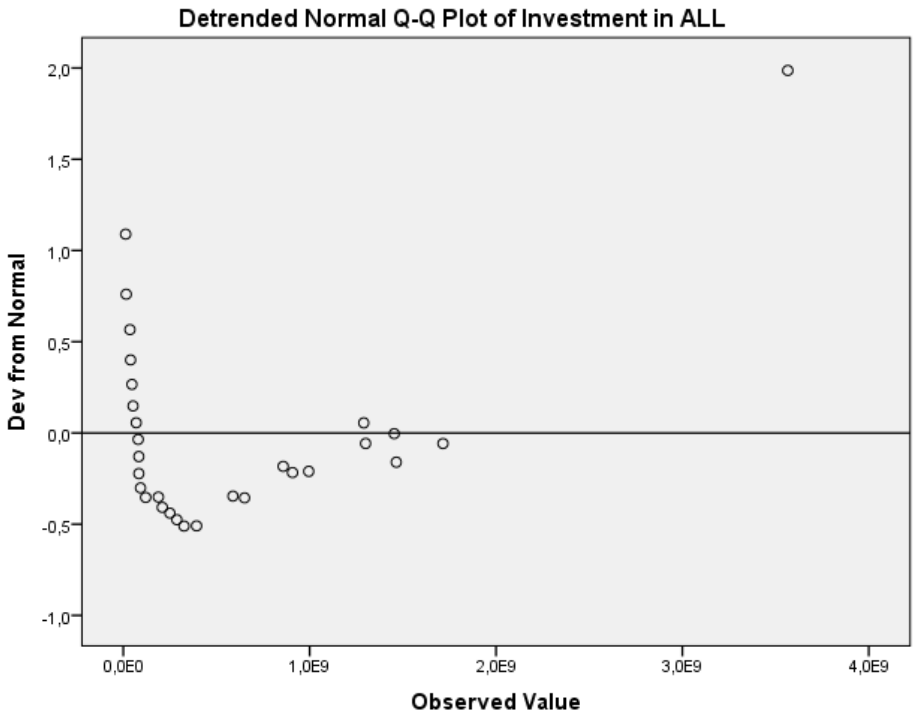

Detrended Normal Q-Q Plot of Power in kW installed
Dev from Normal
1,5
1,0
0,5
0,0
-0,5
-1,0
0
5.000
10.000
15.000
20.000
25.000
Observed Value


25.000
20.000
15.000
10.000
5.000
0
28
Power in kW installed

Investment in ALL






Detrended Normal Q-Q Plot of Investment in ALL
Dev from Normal
2,0
1,5
1,0
0,5
0,0
-0,5
-1,0
0,0E0
1,0E9
2,0E9
3,0E9
4,0E9
Observed Value

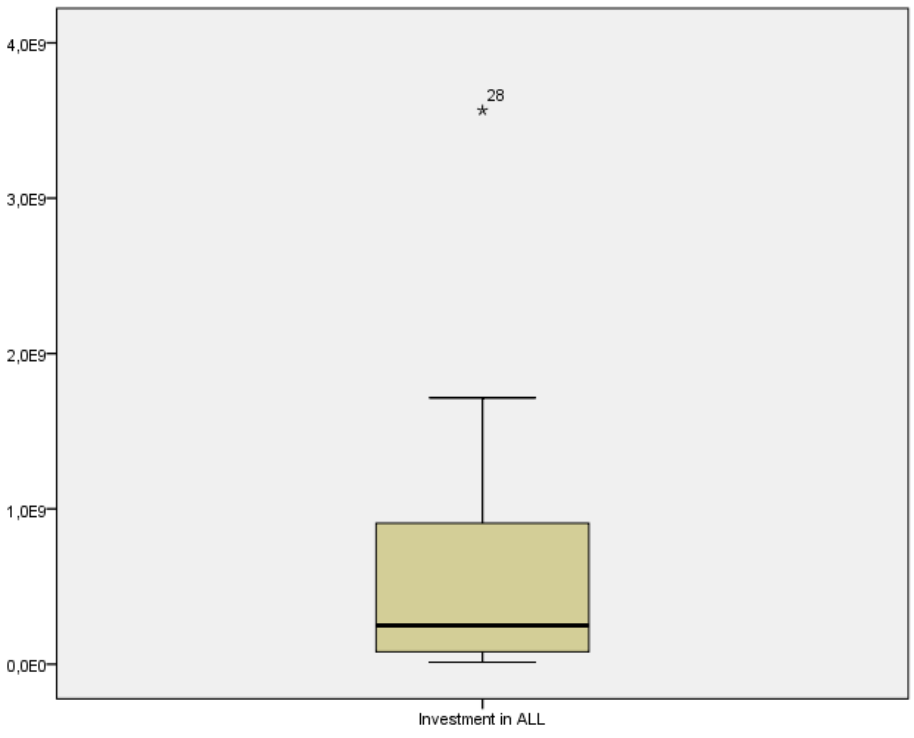

4,0E9
3,0E9
2,0E9
1,0E9
0,0E0
28
Investment in ALL

Table 5 Prodhimi i Energjise Elektrike nga Subjektet Private/Koncesion per vitin 2013

	HIDRO CENTRALET PRIVATE/KONCESION 2013			
	Centrali	Kapaciteti Kw	Prodhimi MWh 2013	Shoqeria
	Kane hyre ne pune deri ne dhjetor 2011			
1	HC Lenie 400 kW	400	2,802	EMZKEL 2003 sh.p.k
2	HC Çerevode 200 kW	200	847	
3	HC Smokthine 9,2 MW	9,200	36,795	Albania Green Energy sh.p.k
4	Bulqize, Bulqize 600 Kw	600	1,666	Balcan green energy shpk
5	Homesh, Bulqize 330kw	330	729	
6	Zerqan, Bulqize 630kw	630	1,443	
7	Arras, Diber 4800	4,800	14,640	
8	Orgjost, Kukes 1200	1,200	4,251	
9	Lekbibaj, Tropoje 1400kw	1,400	5,053	
10	Dukagjin, Shkoder 640kw	640	1,820	
11	Marjan, Korce 200kw	200	433	
12	Lazhan, Korce 100kw	100	321	
13	Barmash, Kolonje 630kw	630	1,573	
14	Trenke 2, Korce 250kw	250	708	
15	Nikolice, Korce 700	700	1,827	
16	Funerrue, Librazhd 1920kw	1,920	6,776	
17	Lunik, Librazhd 200kw	200	1,225	
18	Kerpice, Gramsh 420kw	420	1,017	
19	Ujarnik, Skrapar 630kw	630	1,617	
20	Borsh, Sarande 250kw	250	1,065	
21	Leshnice, Sarande 380kw	380	249	
22	Vekan, Korce 1200kw	1,200	2,804	
23	Muhur, Diber 250kw	250	1,081	
24	Rajan, Kolonje 1020kw	1,020	2,775	
25	HC Ikgoven 2500 kW	2,500	9,804	Wonder power shs
26	HC Xhyre 250 kW	250	2,815	Amal sh.p.k
27	HEC Stranik 1.6 MW	1,600	13,678	Hidroinvest 1 shpk
28	HEC Zall Tove 2.6 MW	2,600		
29	HEC Cernalevo 2.95 MW	2,950	15,272	Hidro Albania Energy
30	HEC Bishnica II 2.5 MW	2,500	11,336	HEC Bishnica II 2.5 MW
31	Dishnica 0.2 MW	200	607	"Dishnica Energy" shpk
32	Lubanja 0.3 Mw	300	503	Elektro Lubanje" shpk
33	Hec Lubinot –Mal –Elbasan 0.25 MW	250	311	"Amara Konversion" shpk
34	Hec HADE KUQ 1 dhe 2 me fuqi 3 MW dhe 0.4 MW	6,400	10,376	HP OSTROVICA
35	Hec Gizaresh	500	2,135	Dacia-Energy shpk
36	Hec"Carshove" me fuqi 1.5 Mw	1,500	3,226	ERMA MP
37	Hec"Picar 1" me fuqi 0,2 MW	200	740	Pushku Picar 1
38	Hec"Qafezezi" me fuqi 0,4 MW	400	1,460	Caushi Energji
39	Hec"HACEP 2" me fuqi 1,7 MW	1,700	0	DUKA T2
40	HC Shpelle 117 kW	117	1,183	xaroll sh.p.k
41	HC Rehove 100 kW	100	0	Projektion Energji sh.a.
42	HC Trenke 1 150 kW	150	0	
43	HC Ilicaj 3,1 MW	3,100	107	ERKO
44	HC Leskovik1 1072 kW	1,072		maksi Elektrik sh.p.k
45	HC Leskovik2 1100 kW	1,100	1,128	
46	HC Orenje 75 kW	75	517	Juana sh.p.k
47	HC Tamarit 150 kW	150	947	WTS Energji shpk
48	HC Benil 125 kW	125	1,470	Marjakaj shpk
49	HC Vithkuq 2115 kW	2,115	12,766	Pavlina 1 shpk
50	HEC Selce 400 kW	400	2,275	Selca Energji shpk
51	HC Sauaj 7MW	7,000	27,821	Energo – Sas shpk
52	Tervol Librazhd 10.6 MW	10,600	39,782	HEC Tervolli shpk
	TOTAL	77,484	262,637	

	Kane hyre ne pune gjate 2012			
1	HEC Ashta 45 MW	45,000	211,190	Energji Ashta shpk
2	HEC Sllabinje 13,8 MW	13,800	37,654	Power Elektrik Slabinje shpk
3	Hec Dardhe 5,8 MW	5,800	15,764	"Wenerg " shpk
4	Hec Peshko 3.43 MW	3,430	11,980	"Koka & Ergi Energy Peshk" shpk
5	Hec –Klos me fuqi 2.6 Mw	2,600	4,457	Malido Energy
6	Hec – Belesova 1 me fuqi 0.150 MW	150	249	"Korkis 2009" shpk
7	Hec- Selisht me fuqi 2 MW	2,000	2,886	Selisht
8	Hec"Martanesh" me fuqi 10,5 MW	10,500	12,479	Albanian Power
9	Hec"Verba 1" me fuqi2 MW	2,000	5,404	Hydro power Plant Of Korca
10	Hec"Pterra" me fuqi1,08 MW	1,080	13,842	Hidro Banshi
11	Hec"Pterra 2" me fuqi 2 MW	2,000		
12	Hec"Ulapaj" me fuqi 13,62 MW	13,620	43,179	Gjo.Spa.POWER
13	Hec"Lura 1" me fuqi 6,54 MW	6,540	53,296	Erdat Lura
14	Hec"Lura 2" me fuqi 4,02 MW	4,020		
15	Hec"Lura 3" me fuqi 5,66 MW	5,660		
16	Hec" Kumbull- Markurth" me fuqi 0.83 Mw	830	1,822	DN& NAT Energy
	TOTAL	119,030	434,201	

	Kane hyre ne pune gjate 2013			
1	Lura, Diber 750kw	750	785	Balkan Green Energy
2	HC Gjanç 3700 kW	3,700	10,591	Spahiu Gjanç sh.p.k.
3	HEC Rapuni I 4 MW	4,000	10,538	C & S Construction Energy shpk
4	Hec Pobreg 9 MW	12,300	13,887	"Energy Plus" shpk
5	Hec –Cerunje1 me fuqi 2.3 MW;	2,300	3,645	
6	Hec –Bele 1 me fuqi 5Mw	5,000	35,336	
7	Hec – Bele 2 me fuqi 11 MW	11,000		
8	Hec-Mgulle me fuqi 0.28 MW	280	364	Erald Energjitik
9	Hec- Kryezi 1 me fuqi 0.6 Mw	600	1,720	Bekim Energjitik
10	Hec "Koka 1" me fuqi 3,2 MW	3,200	4,723	Snow Energy
11	Hec"Molbaj" me fuqi 0,6 MW	600	648	Energji Xhaci
12	Hec"Tucep" me fuqi 0,4 MW	400	454	Tucep
	TOTAL	44,130	82,492	

TOTAL H/C Priv/Konc 2013	240,644	759,330	

H/C-et qe kane prodhuar per KESH sha gjate vitit 2013			
Hec"Ulez" me fuqi 24 MW	24,000	81,232	Hec Ulez-Shkopet
Hec"Shkopet" me fuqi 24 MW	24,000	63,344	
Hec"Lanabregas" me fuqi 5 MW	5,000	33,943	HEC Lanabregas
Hec"Bistrica 1" me fuqi 22,5 MW	22,500	60,162	HEC Bstrka 1,2
Hec"Bistrica 2" me fuqi 5 MW	5,000	22,968	
TOTAL	80,500	261,649	

H/C-et qe kane prodhuar per "KURUM" gjate vitit 2013 (Gusht-Dhjetor)		
Hec"Ulez" me fuqi 24 MW	24,000	126,586
Hec"Shkopet" me fuqi 24 MW	24,000	
Hec"Bistrica 1" me fuqi 22,5 MW	22,500	
Hec"Bistrica 2" me fuqi 5 MW	5,000	
TOTAL	75,500	126,586

(Burimi ERE)

List of concessions by contract of small and medium hydropower plants.

Nr	Emertimi HEC-it	Subjekti	Data e Hapjes se gares	Vlera e Investimit	Njesia	Fuqia e vendosur kW	Energjia	Shenime
Kontrata te miratuara me VKM, nga AK dhe Gara te mbyllura per te cilet eshte shpallur fituesi								
1	Egnatia	Remi shpk		321,956,600	leke	5,000	22,000,000	VKM nr.609, dt 12.09.2007
2	Tervol	Ble-Klo-Ar shpk		325,800,167	leke	10,000	40,000,000	VKM nr.724, dt 30.10.2007
3	Verbe-Selce	Xhemi 02 shpk		287,310,000	leke	2,800	16,540,770	VKM nr.885, dt 12.12.2007
4	Qyteze	Muso shpk		27,700,000	leke	250	1,350,000	VKM nr.152, dt 13.02.2008
5	Çarshove	Korsel shpk		83,500,000	leke	1,200	6,300,000	VKM nr.368, dt 27.03.2008
6	Sllabinje	LNK shpk.		1,290,117,487	leke	9,300	50,000,000	VKM nr.526, dt 23.04.2008
7	Labinot Mal-Elbasan	Ansara shpk		12,500,000	leke	250	1,300,000	VKM nr.433, dt 08.04.2008
8	Stebleve	Stebleva sh.p.k.		159,680,320	leke	3,400	12,600,000	VKM nr.431, dt 08.04.2008
9	Lapaj	Spahiu Gjanc shpk, Fatjon shpk, S.G.A. sha, Armemil shpk		1,453,500,000	leke	12,600	52,400,000	VKM nr.432, dt 08.04.2008
10	Lengarica1, Lengarica 2	Hasi Energji shpk		1,980,904,000	leke	6,200	35,700,000	VKM nr.543, dt 01.05.2008
11	Peshku	Koka shpk		188,055,946	leke	1,900	11,580,000	VKM nr.541, dt 01.05.2008
12	Stavec	Koka shpk		870,315,194	leke	6,000	25,620,000	VKM nr.542, dt 01.05.2008
13	Kacni	K.I.S.I shpk		133,121,000	leke	1,100	6,772,032	VKM nr.568, dt 07.05.2008
14	Kabash 1, Kabash 2	Adnain shpk		671,000,000	leke	5,200	32,005,729	VKM nr.570, dt 07.05.2008
15	Stravaj	Mak Olimpik shpk		503,529,364	leke	3,626	16,317,000	VKM nr.569, dt 07.05.2008
16	Tuçep 2	Duka T2 shpk		166,000,000	leke	1,400	7,500,000	VKM nr.567, dt 07.05.2008
17	Strelca 1, Strelca 2, Strelca 3	Busa shpk		1,084,000,000	leke	6,126	43,233,264	VKM nr.718, dt 14.05.2008
18	Lura 1, Lura 2, Lura 3	Erdat shpk		1,300,177,500	leke	10,993	53,308,264	VKM nr.716, dt 21.05.2008
19	Rapuni 1, Rapuni 2	C&S Construction shpk		749,080,000	leke	8,250	44,650,000	VKM nr.717, dt 14.05.2008
20	Suha 2	Albaenergjiaplus shpk		360,000,000	leke	3,400	7,300,000	VKM nr.719, dt 14.05.2008
21	Bistrica 3 e 4	Bistrica 3		756,400,000	leke	2,553	17,823,000	VKM nr.711, dt 21.05.2008
22	Martanesh	Sigers shpk		857,861,985	leke	3,600	12,000,000	VKM nr.720, dt 14.05.2008
23	Selishte	IRZ shpk		120,000,000	leke	1,300	8,563,000	VKM nr.712, dt 21.05.2008
24	Vlushe	Aurora Konstruksion shpk		1,715,320,000	leke	14,200	65,000,000	VKM nr.713, dt 21.05.2008
25	Stojan	El-Er Energy shpk		124,333,623	leke	1,400	6,000,000	VKM nr.1107, dt 30.07.2008
26	Prelle1, Prelle 2	B.sh: "Endi-E" shpk," EKO A2" shpk		1,512,585,536	leke	7,800	35,800,000	VKM nr.1159, dt 13.08.2008
27	Holta Kabash, Holta Poroçan	Atlas Sh.a		500,000,000	leke	4,700	23,300,000	VKM nr.1396, dt 17.10.2008

Nr	Emertimi HEC-it	Subjekti	Data e Hapjes se gares	Vlera e Investimit	Njesia	Fuqia e vendosur kW	Energjia	Shenime
28	Bishnica 1, Bishnica 2	Bsh: Titan shpk, Osmani sh.p.k.		250,000,000	leke	2,950	12,910,000	VKM nr.1395, dt 17.10.2008
29	ASHTA	OSTERREICHISCHE ELEKTRIZITÄTSÈIRTSCHAFTS-AKTIENGESELLSCHAFT		19,520,000,000	leke	48,200	230.000.000	VKM nr.1363, dt 17.10.2008
30	Klos	Malido shpk		92,422,100	leke	1,519	5,130,000	Hyre ne fuqi, dt 28.01.2009
31	Radove	Tulla T		188,000,000	leke	2,000	11,600,000	Hyre ne fuqi dt 03.03.2009
32	Progonat-Lekdush, Bençe e Siperme	Radici Energie S.P.A.		929,146,830	leke	6,700	28,500,000	Hyre ne fuqi, dt 26.03.2009
33	"Orgjost i Ri", "Bele 1", "Bele 2", Topojan 1", "Topojan 2"	B.sh.: "Euron" shpk, "Kadria" shpk, "Teuta Konstruksion" shpk		3,565,744,707	leke	24,260	108,537,038	VKM nr.1581, date 3.12.2008
34	Niçe	Devy shpk, Zyfi shpk		49,800,000	leke	600	2,740,000	Hyre ne fuqi dt 02.02.2009
35	Murdhari 1, Murdhari 2	"Euro-AL" sh.p.k dhe "Energy Solution" sh.p.k		501,411,750	leke	3,680	14,761,970	Hyre ne fuqi, dt 09.03.2009
36	Vertop	Salillari shpk		283,950,430	leke	1,200	4,650,000	Hyre ne fuqi, dt 18.05.2009
37	Kaskada e Devollit	EVN		130,000,000,000	leke	319,000	985,400,000	Ligji Nr. 10083, date 23.02.2009
38	Gur Shpat 1 dhe Gur Shpat 2	"Spahiu Gjanç" shpk		176,738,773	leke	1,670	7,180,000	Hyre ne fuqi, dt 03.02.2009
39	Valbone	T'Plani shpk		274,000,000	leke	2,300	11,028,240	Hyre ne fuqi dt.29.01.2009
40	Dars	Klenis shpk		1,230,440,516	leke	7,600	43,096,186	Hyre ne fuqi dt 30.01.2009
41	Kukur 2	Elektro Impjanti Tecno Luxe, Abaco Energia Pulita		4,547,551,450	leke	20,357	114,530,000	VKM nr.702, dt 11.06.2009 botuar ne FZ 24.072009
42	Lubonje	Alb Agron dhe Xhengo	29.08.`08	39,000,000	leke	300	1,300,000	Hyre ne fuqi date 04.05.2009
43	Belesova 1dhe Belesove 2	Belesove 1 shpk	05.09.`08	46,315,030	leke	450	1,930,000	Hyre ne fuqi date 25.03.2009
44	Dishnice	Agro-Zagma dhe Favina	08.09.`08	15,300,000	leke	160	800,000	Hyre ne fuqi date 06.05.2009
45	Cernaleve (Borje, Oreshke, Cernaleve 1 dhe Cernaleve)	Hydroalbania, Ferati, Euro-Alba-EA, LRL	25.08.`08	830,097,322	leke	12,200	55,677,738	Hyre ne fuqi date 30.04.2009
46	Picar 1	Perivoli shpk	03.10.`08	35,456,000	leke	200	1,200,000	Hyre ne fuqi date 28.04.2009
47	Dukagjin 1, 2, 3	Interenergo Albania shpk	22.04.`08	18,876,907,000	leke	127,600	530,350,000	VKM Nr.698, date 11.06.2009 Hyn ne fuqi me botimin ne FZ nr.113, dt.24.07.2009

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48	Malikaster	Mix Tecnic, 2 T, Perxhola,Albadi, UDSA , ME-Aj, shpk	23.10.`08	4,443,351,400	leke	30,650	153,786,127	VKM Nr.701, date 11.06.2009 Hyn ne fuqi me botimin ne FZ (nr.114, dt.24.07.2009
49	Bence ,Tepelene	Ferrar shpk, Alfa Projekt		675,221,200	leke	5,405	30,340,000	Hyre ne fuqi dt 16.06. 2009
50	Mbi lumin Curraj	Hydro Power Nord Albania	30.10.`08	16,103,898,000	leke	81,000	394,300,000	Ne procesin e negocimit
51	Tujanit, Tirane	Dyne, Beta dhe VIKI		5,239,800,000	leke	16,200	64,100,000	Per negocim nuk eshte paraqitur
52	Rajan 2	Imet sha Advicor C. Energy	22.12.`08	727,480,830	leke	6,960	35,655,000	Hyre ne fuqi date 26.06.2009
53	Zerec	Eco-Beton shpk	22.10.`08	120,311,959	leke	1,000	4,714,831	Hyre ne fuqi date 11.09.2009
54	Mollaj	Bilisht Kompani shpk	21.01.`09	79,700,000	leke	600	1,980,000	Hyre ne fuqi date 15.06.2009
55	Dunice	By Best Duty Free shpk dhe Vortek shpk	12.09.2008	175,585,602	leke	2,870	12,629,273	Hyre ne fuqi date 16.06.2009
56	Faqekuq	Busa shpk dhe IRZ shpk	12.02.`09	587,975,273	leke	6,400	31,649,426	Hyre ne fuqi date 25.06.2009
57	Shemri	Oberaldi shpk dhe Lala	26.01.`09	69,026,908	leke	1,080	4,867,277	Hyre ne fuqi date 16.06.2009
58	Kryezi, Kryezi I Eperm	Oberald shpk, Alba Konstruksion shpk	23.02.`09	50,419,481	leke	800	3,431,782	Hyre ne fuqi date 16.06.2009
59	Bushtrice 1 dhe 2	ZA Power, Fatjon shpk, Spahiu Gjanc shpk	27.11.`09	3,673,402,000	leke	28,300	151,000,000	Miratuar me VKM nr.767, dt 08.07.2
60	Dragobi	Gener 2	25.04.`08	2,404,858,492	leke	22,760	116,014,456	Hyre ne fuqi date 27.07.2009
61	DARDHA 1	CNR	23.12.`08	907,956,000	leke	4,010	21,690,000	Hyre ne fuqi date 18.08.2009
62	Meshanik dhe Guve	Drini 2000	12.03.`09	216,152,500	leke	1,650	9,675,853	Hyre ne fuqi date 14.07.2009
63	Pobreg	Frigo Food Energy Invest	26.03.`09	995,034,550	leke	9,000	40,450,000	Hyre ne fuqi date 21.07.2009
64	Cemerica 1,2,3	REJ shpk	23.04.`09	300,673,715	leke	3,890	18,540,000	Hyre ne fuqi dt 14.07. 2009
65	Qafezez	Çaushi/K shpk	20.01.`09	51,955,070	leke	400	2,865,654	Hyre ne fuqi dt 24.07. 2009
66	Labinot Fushe	Emir Star & Senko	07.05.`09	347,706,122	leke	2,200	15,316,520	Hyre ne fuqi date 23.07.2009
67	Thane	Delia Grup	15.06.`09	1,042,888,000	leke	15,000	66,000,000	Hyre ne fuqi date 18.08.2009
68	Ftere	Hydro Valbona shpk& Anonime kakavije sha, TID shpk	22.01.`09	650,565,750	leke	3,000	19,300,000	Hyre ne fuqi me 31.08.2009
69	Koka 1	Dushi shpk	02.02.`09	392,862,289	leke	2,500	12,410,000	Hyre ne fuqi me 27.08.2009

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70	Mbi lumin Kardhiq	Albenergjiaplus shpk	25.01.`09	1,041,453,039	leke	10,660	49,621,000	Hyre ne fuqi me 10.09.2009
71	Kaskada e Luses (7 hec)	GEOENERGIE spa	30.01.`09	4,781,675,816	leke	21,360	101,770,000	Per negocim nuk eshte paraq
72	Vukel 1,2	Interenergo Albania	24.04.`08	11,202,300,000	leke	52,800	119,783,000	Ne procesin e negocimit
73	Lajthize dhe Mullias	Merga shpk	26.09.`08	311,332,059	leke	4,485	22,969,000	Hyre ne fuqi 09.09.2009
74	Menkulas Rishpallje	"Arela"shpk	16.04.`09	124,254,000	leke	2,260	12,213,000	Eshte shpallur Fituesi nga AK
75	Lenie , Shales, Strelce	Gjoka konstruksion	29.06.`09	354,282,240	leke	2,170	10,118,000	Ne procesin e negocimit
76	Domaj , Has	Thaci shpk	16.01.`09	15,000,000	leke	200	1,000,000	Hyre ne fuqi 10.09.2009
77	Seke rishpallje	Hydro Project & Gener 2	15.04.`09	1,177,887,502	leke	11,200	57,064,316	Per negocim nuk eshte paraq
78	Shtike	Qeramika e Jugut	12.06.`09	87,570,000	leke	920	3,241,405	Hyre ne fuqi 11.09.2009
79	Vinjolle	Komp Energji & STGC	29.04.`09	200,000,000	leke	2,500	13,350,792	Hyre ne fuqi 02.09.2009
80	Gomsiqe 1,2,3	Roen Company	06.05.2009	2,149,411,466	leke	20,475	101,490	Hyre ne fuqi 10.09.2009
81	Langarica 3	Energia Pulita shpk	27.05.`09	309,815,533	leke	3,940	16,668,473	Hyre ne fuqi ne daten 07.09.
82	Gizavesh	Gener 2	23.05.`08	5,273,943,244	leke	37,500	148,974,000	Ne negociim kontrate
83	Rapuni 3	C&S Construction	22.06.`09	790,361,250	leke	9,000	55,066,000	Hyre ne fuqi 11.09.2009
84	Nishove 1 dhe 2	Nishova shpk	18.06.2009	89,684,217	leke	1,110	6,909,122	Hyre ne fuqi ne daten 09.09.
85	Sllabinje 2	LNK & EuroTeorema	18.08.`08	847,000,000	leke	13,810	71,587,000	Hyre ne fuqi ne daten 03.09.
86	Orenje 1 dhe Orenje 2	Hertis &Caraglio	20.08.`09	101,519,000	leke	14,240	65,429,295	Ne negociim kontrate
87	Ura e Prenit	LNK shpk Erniku Loshi BL, OIL sha	15.09.`08	2,109,030,000	leke	29,770	136,452,426	Hyre ne fuqi ne daten 03.09.
88	Shkalle Cerrunje	N.E.SH	15.02.`09	1,465,039,743	leke	9,688	39,568,479	Hyre ne fuqi ne daten 31.08.
89	Sotire 1 dhe 2	Shushica shpk	24.06.`09	144,554,509	leke	2,100	8,578,428	Hyre ne fuqi 11.09.2009
90	Qukes	Hertis &Caraglio	22.08.`08	6,830,320,000	leke	46,422	234,000,000	Derguar OTSH per Oponence
91	Spathare	Luçente	11.08.`09	80,070,750	leke	1,038	6,132,036	Eshte shpallur Fituesi nga AK
92	Trebisht 1	Erniku shpk	26.08.`09	209,336,441	leke	1,775	8,047,200	Hyre ne fuqi 14.09.2009

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93	Peqin	HEC Peqin shpk	19.09.`08	521,573,382	leke	4,100	23,084,170	Hyre ne fuqi 14.09.2009
94	Dragostunje	Gurra shpk	29.09.`08	36,200,000	leke	170	1,100,000	Hyre ne fuqi 11.09.2009
95	Ujanik	Dava-1 shpk	14.01.`09	530,469,300	leke	4,000	25,061,148	Eshte shpallur Fituesi nga AK
96	Shutine	AS-04 Albania shpk	10.07.`09	115,000,000	leke	1,400	6,178,000	Ne negociim kontrate
97	Bisak	Korenti shpk	04.02.`09	50,617,908	leke	750	3,520,000	Ne negociim kontrate
98	Zalli I Tarit	Arilta B	24.08.`09	416,000,000	leke	6,000	30,000,000	Eshte shpallur Fituesi nga AK
99	Grabove	Energji Grup shpk	30.01.09	5,602,684,194	leke	35,370	171,755,000	Ne negociim kontrate
100	Veleshica 1	Advisor shpk	26.03.2009	3,101,801,814	leke	24,920	135,111,000	Ne negociim kontrate
	SHUMA			**288,334,043,178**	**leke**	**1,339,302**	**5,391,454,210**	