“Effectiveness and Efficiency of the Electricity Consumer Contracts’ Regulation in a European Context”

Ioannis P. Papanastasopoulos
Attorney at Law,
LLM Utrecht

Abstract

A lot of ink has been spilt and a lot of hair has been split on how competition can be effectively introduced in the electricity supply market. The challenges confronted by the regulators are neither few nor easy to overcome. Competition is expected to work on consumers’ interest. It has, though, to be established beforehand. The natural monopoly “energy market regulation” has now changed to become “regulation for competition”. New types of regulatory instruments are employed to facilitate the promising competition and help the consumers to enjoy better prices in their electricity bills. Consumers are expected to benefit in their electricity contract quality too. The competitive process functions as a form of natural protection to electricity consumers. But competition does not come alone. There, where only one option used to exist, now opportunity-searching-switching-contract signing costs emerge and the consequent information asymmetry problem, namely the signing without reading problem (SWR). Can the newly introduced regulation solve the market failures so that contract quality will improve and actual competition will be established? This research question is answered after a transaction cost analysis approach. Electricity contract regulation is rather effective and efficient in achieving introduction of competition in the market, and consumer protection.

1. Main Concepts, Efficiency and Effectiveness

Inefficient and unfair terms are closely related. Society has adopted laws that declare unfair contractual clauses that are always or usually inefficient. There are though contract terms that could be found unfair by a judge without their being inefficient. At the same time the net of law is not spread wide enough to include all the inefficient terms. The more unfair or inefficient clauses are contained in a contract the lower the contract quality is. The more efficient and fair terms included in a contract the better the contract quality is. This paper often deals with the contract quality thus it is necessary and primordial to define these two notions.

1.1 Efficiency and Fairness in Consumer Contracts

A European approach to the "unfair term" is presented. A contractual term, contained in a consumer SFC, is unfair according to the "Council Directive93/13/EEC on Unfair Terms in Consumer Contracts ar.3(1)" (hereafter UTDirective) '*if, contrary to the requirement of good faith, it causes a significant imbalance in the parties' rights and obligations arising under the contract, to the detriment of the consumer*' This provision establishes two criteria for an "unfair test". The first criterion is the concept of "good faith". The second that of "significant imbalance" in parties' rights and obligations. There is no hierarchy between the two criteria. The use of both though, makes the directive's provision and thus the "unfair test" complicated.

Thomas Pfeiffer and Martin Ebers scholars members of the Acquis Research Group suggest that the "good faith" criterion is more simple and easy to use. They also find the "significant imbalance" criterion complicated in use and often irrelevant to the fairness of the rule (T.Pfeiffer, M.Ebers, 2007, pg 235). Fairness is a concept that has a strong legal/ethical character and, thus, is preferred by lawyers that are more familiarized with the principle of good faith. On the other hand legal economists like G. DeGeest see the "significant imbalance" concept as a means for economics to enter the court judgment when enforcing the Directive's provisions (G. DeGeest, 2002, pg 12). DeGeest considers the principle of good faith can be also used in order to forbid inefficient closes to be drafted or enforced e.g."performance in good faith" (G. DeGeest, 1994, pg 215-218).

1.1.1 Contractual Clauses and Efficiency

In the same concepts legal scholars see fairness, while economists and L&E scholars see efficiency. Scholars like Kaplow and Shavell (2003) have stressed the need for social policies to be oriented to individual well-being, without weighting independently notions like fairness (L. Kaplow and S. Shavell, 2003). Hatzis (2008) specifically points out that courts should focus on economic analysis and not in an abstract concept of fairness and morality, when investigating a contract's content, or else consumers' welfare may be harmed (A. N. Hatzis, 2008, pg 48). Here is important to present what an inefficient term is.

Firstly a contract term is inefficient when it destroys more wealth of one party that it creates for the other. As a result, society as a total is worse off e.g. a clause in a house rental contract that gives the land owner the right to evict the tenants if they are two days late in paying the rent. Secondly a contract term is inefficient if the execution of the contract benefits less the contracting parties than it hurts a third party or the society as a total (P. Van Wijck, J. Theeuwes, 2000, pg 80-82). Thirdly a contractual term is considered inefficient when it is

purely redistributive. In the later case the problem of adverse selection is expected to occur (especially in competitive markets) and furthermore non-welfare-producing drafting investments are done by the contract drafters (G. De Geest, 2002, pg 3-4). The categories of inefficient terms above are not exhaustive but they show what an inefficient term is; a term that benefits the drafting party less than the cost it causes to consumers (A. N. Hatzis, 2008, pg 47). All the above destroy more value than they create causing Pareto deterioration in the market.

In general a contract term is inefficient if the benefits it produces for the society, in terms of cooperation surplus is less that the harm that it inflicts to the social welfare directly (the first case and second the case) or indirectly (the later case). A contract is inefficient when it contains inefficient contract closes. The more inefficient clauses it contains the less efficient the contract is. The more inefficient a contract is, the more its quality deteriorates.

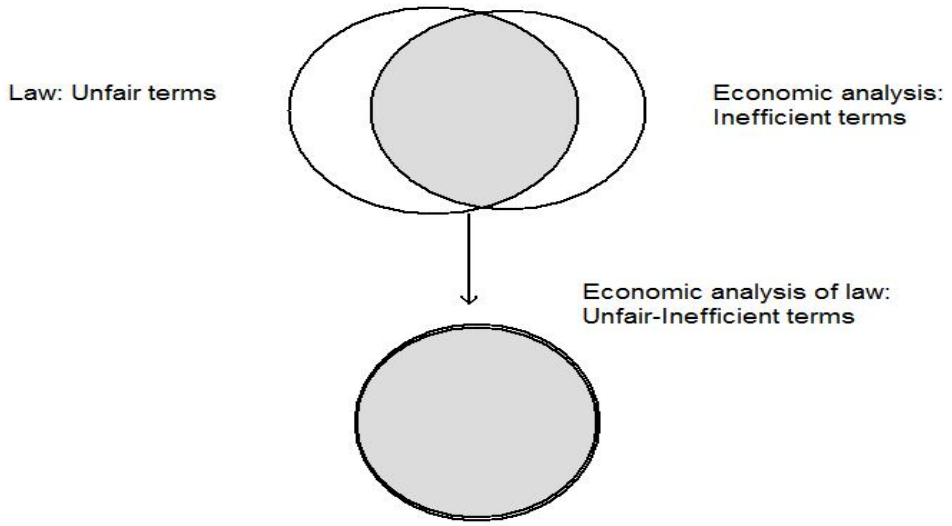

Figure 1: Economic Analysis of Law Aims to a Coincidence of the Notions Unfair and Inefficient

This paper deals with unfair and inefficient electricity consumer contracts and their regulation. It is therefore necessary to define the consumer notion here. The UTDirective in the article 2(b) reserves for non business consumers (residential in the electricity case) the special protection of art.3. Small Business consumers are not awarded any special protection. Both groups have no saying over the contractual content and thus can not negotiate an individual agreement. Furthermore they share the same sophistication and face the same information problems (A. Robinson, 2005, pg 7). This is probably the reason why small business consumers are distinguished from the rest of business consumers by "2003/54/EC

Directive Concerning Common Rules for the Internal Market in Electricity". Small enterprises enjoy, in regards to some aspects, the same level of protection with residential electricity consumers(Second Electricity Directive19, 24, art.3(3),28(3), TEP). Therefore for this paper "consumers" are the residential and small business consumers due to there vulnerability to unfair/inefficient clauses in electricity SFCs and their similar status in the market from an economic perspective.

1.1.2 Fairness, Efficiency and the SWR in SFC

The overwhelming majority of the written contracts are standardized. Most if not all of terms contained are offered on a take-it-or-leave-it basis. The consumer can not negotiate them and has two options: either to sign the contract either not. A differentiation between legal and the economic scholars is also noticeable in their approach to SFC. Legal scholars as Friedrich Kessler and T. Rakoff linked this kind of offers with bargaining power derived by market power. For Kessler the existence of a SFC offered to the consumers in a take-it-or-live-it basis reveals monopoly power. The monopolist according to this analysis abuses its market power by obliging the captive consumer to enter a SFC (F. Kessler, 1943). This contract will be signed even if the terms are benefiting the monopolist in the expense of the consumer. This view of monopoly SFCs is still popular among lawyers (A. Katz, 1998, pg2). Many legal scholars still today regard SFCs with ambivalence. Special concerns are rose in respect to the parties' autonomy (B. Hermalin, A. Katz, R. Craswell, 2006, pg92).

An Economic View on SFC

The economic analysis though, does not seem to support this argument. Numerous Law and Economics scholars like Posner (1979,1992), DeGeest (2002), Schwartz (1977), Cooter and Ulen (2008) have pointed out that the reason that a consumer will sign an inefficient, bad quality contract that benefits the drafter-seller is mostly information asymmetry rather than the bargaining power of the seller. Consumers' time is a scarce resource. Many of them will avoid reading, evaluating and signing the best contract due to opportunity cost. Thus they sign contracts that do not read or understand. Suppliers, being rational and self-interested, add inefficient clauses in the contracts they draft in order to benefit from this information asymmetry. Therefore consumers find themselves bound in inefficient and/or unfair contracts that have never read or understood. If all the consumers would read the contracts they could opt for a better contract offer. Therefore consumer themselves can regulate the contract

content and improve the contract quality. In reality though, this is impossible. Only a fraction will devote adequate time in reading the contracts available. Consequently suppliers can still take advantage of consumers that do no read the contracts (G. DeGeest, 2002, pp235,238-239).

The fact that the contract content is not monitored by consumers and the consequent SWR has an impact in contract quality. If consumers read and evaluated the contracts signed, competitive suppliers would bid in contractual quality. This does not happen; therefore the quality is far from optimal. Consumers when signing a contract assume (because they do not read it) that quality is not good so they are not willing to pay for a good quality contract. Consequently there is no demand for quality contracts and contract quality deteriorates more and more (G. DeGeest, 2002, 240). This asymmetric information problem is analogous to the phenomenon that Akerlof described as a market for lemons for the used car market in his influential and multi-quoted article (G. A. Akerlof, 1970, pp489-492).

The main argument that the monopolist does not have incentives to add inefficient clauses in her contracts is that, under the assumption that she acts rationally, she would prefer to take advantage of her market-bargaining power through pricing. The monopolist is expected to draft efficient non price terms in a contract. These terms are expanding while the price terms are distributing the surplus of the agreement. It is attractive for the monopolist to have efficient terms in SFCs offered to consumers in order to expand the surplus and then obtain it all by pricing (R. Cooter and T. Ulen, 2008, pp302-303). This monopolist's choice is more attractive if it is taken into account the fact that courts are more reluctant in reviewing the price terms than the non price terms of a contract. Thus a monopolist is expected to offer terms that are as efficient and as responsive to consumers' demand for quality as in perfect competition. By not providing attractive non price terms to consumers the monopolist is losing agreements that would have been done with monopoly prices (A. Schwartz, 1977, pg1072).

As information problem, inefficient terms in SFCs, is expected to be more severe in a monopoly or in a competitive environment? Posner claims that the informational problem is expected to be milder in the monopoly case. Since the consumer invests more in the agreement (monopoly pricing) and consequently is expected to be more careful of the contract content (R. Posner, 1992, pp114-115). Thus Posner rejects the argument that in the monopoly consumers do not read the contracts since there is no alternative. Supporting to the view that the informational problem could be expected to be less severe in monopoly is the fact that there is only one type of contract in the market and it is cheaper, in terms of opportunity cost, for consumers to be informed about its content. Therefore the information asymmetry is

expected to be more severe in the competition era where consumer has to evaluate various contract offers in limited time.

In addition DeGeest argues that even a small difference in the percentage (in monopoly and in competition) of the consumers that read the contracts would not make a significant difference in the contract quality that would justify specific regulatory intervention (G. DeGeest, 2002, pg241). This analysis shows that the monopolist does not have more incentives to add inefficient terms in SFCs than a competitive firm has. It is thus the monopolist's first best choice to extract any monopoly rent through pricing. If she can do so she will offer efficient non price terms (R. Cooter and T. Ulen, 2008, pg 303).The legal approach to unfair/inefficient terms as a market power implication is thus flawed.

The resemblance between the monopoly contract quality analysis and the monopoly product quality analysis is strong. Indeed the monopolist, under the assumption that the cost restrains and the demand for quality do not change in different market structures, is expected to provide the same product-service quality as a competitive firm (A. Schwartz, 1977, pg1074). Following the same reasoning Schwartz argues that contract quality is independent of the market structure. Schwartz mainly bases this argument on the strong analogies between the contract quality and the product quality which he finds very strong.

1.2 Effectiveness and Efficiency of the Legal and Regulatory Framework

As the research question states this paper is an attempt of evaluating the regulatory and legal framework that leads to the liberalization of the European electricity market. The main criteria for evaluating the electricity consumer contract regulation are its effectiveness and its efficiency. Nevertheless both efficiency and effectiveness are too general and vague to be directly applicable as a test. A regulation can be evaluated in relation to its effectiveness and efficiency from various aspects. Consequently a specification is necessary. These notions are the criteria used here in an effort to judge whether the regulatory attempt, in relation to the consumers' contracts, is a "good" one. Thus the benchmarks used is developed and the test used in this paper is built.

1.2.1 Effectiveness and Efficiency as Criteria

It is useful to start by giving a set of criteria that can be used in an attempt to examine whether a regulation is good. Baldwin and Cave in their handbook "Understanding Regulation", focused in a multidisciplinary analysis of utility regulation, outline the means of

identifying “good” regulation. The criteria set by are most comprehensive. The authors do not focus solely on an economic evaluation of regulation, but they follow a multidisciplinary approach.

The first criterion they set is whether regulation is authorized by the parliament - the paramount of democracy by a legislative mandate (Baldwin and Cave, 1999, pg78). The second criterion is the degree of the accountability of the regulator. A regulator accountable for his action is controlled by democratic institutions in regard to his actions-regulations (R. Baldwin, M. Cave, 1999, pg79). The third criterion is whether the regulation was adopted through a procedure that can be viewed as due. Due can be a regulation making procedure that is fair, transparent and accessible (R. Baldwin, M. Cave, 1999, pg79). The fourth criterion is whether the regulator possesses the relevant expertise. This means that the regulation is an output of an expert judgment (R. Baldwin, M. Cave, 1999, pg80).

The fifth criterion is a test whether the regulation is an efficient one. The regulation adopted can be efficient in two ways. Firstly because it achieves the mandated objectives with the least cost. Secondly because it results to an efficient outcome in the industry. In the later case the outcome is an efficient one because it is considered as such by criteria contained in the mandate. Baldwin and Cave distinguish the regulatory efficiency from the regulatory effectiveness. Objectives are achieved by the efficient regulation (in the first sense) in the least cost. The effective regulation achieves the objectives by bringing in practice the actual mandated desired results, no matter the cost (Baldwin and Cave, 1999, pg81). The second, third and fourth criteria refer mostly to the regulatory authority and the reprocess, while the first and the fifth, namely the “legislative mandate” and “efficiency-effectiveness”, are mostly related to the regulatory outcome in the regulated industry.

As pointed out above this research focuses mostly in efficiency and effectiveness of the electricity SFC regulation. This is not because the other aspects of the good regulation test are considered less important (Stern, J. and Cubbin, J., 2005). The three criteria that refer to the regulatory authority or the regulatory process itself (accountability, transparency-due process and expertise) are themselves rather important requirements for a good regulation. Nevertheless this paper refrains from analyzing these aspects of the European and member state level regulation-legislation systematically. The weaknesses and strengths in relation to transparency, accountability and expertise issues of the European level legislatory and regulatory processes and institutions is widely researched. The European level legislation and regulation in electricity supply market is expected to be of the same quality. Consequently being of more general interest and scope these three criteria are not examined.

Member state level the approach is the same are as well most important in an attempt to evaluate a member states regulatory framework as a "good" one, the task to have such an overview for each member state's regulator is subject of a comparative study.

1.2.2 Goals and Objectives as Criteria

The aspects of the regulatory quality that are mainly discussed are the effectiveness of the regulation in relation to the mandated objectives and the efficiency of the regulatory outcome in the industry. The first step is to detect the mandated objectives in the European level regulation-legislation. Stern and Cubbin (2005) in a review of the benchmarks applied for evaluating electricity utilities regulation outline seven major objectives: efficiency and amelioration of service quality, reduction of operating and investment costs, competitive prices, reasonable rate of return for the natural monopoly elements, competition policy goals and deterrence of market abuse by incumbents, reduce excess capacity margins, universal service obligation (Stern,J.andCubbin,J.,2005,p27). Of these the competition objective (price and non price) and the deterrence of market abuse are related to the supply market. Indeed the European electricity regulation goals and objectives coincide with those of Stern and Cubbin.

The benchmarks of evaluation, the goals of the regulatory reform and the objectives set by the directive are analyzed. A theoretical framework-test has been built. Therefore the criteria of evaluation in this paper are:

a. Is the European and the member state level regulation of electricity consumer contracts effective in promoting competition and consumer protection in the retail market?

b. Are the results in the market efficient taking into account the objectives set in the European level legislation?

2. Legal and Regulatory Framework

There are various European directives-regulations that govern the field of electricity supply market and specifically the electricity consumer contracts.

2.1 Legislation

In regards to European legislation there are several directives and regulations that are currently enforced in energy sector. Detailed measures concerning consumer protection can be found in the provisions of the 54/2003/EC Directive (Second Electricity Directive) and particularly in Annex A. In addition Third Energy Package (TEP) legislation-regulation and

Third Electricity Directive that it introduced in 2009, amended and empowered the consumer protection provisions.

2.2 The Third Energy Package

The Second Electricity Directive was a bold step forward to the liberalisation. The retail electricity and gas market, though, was not yet open to competition. This goal among others was the pursuit of the Third Energy Package's Electricity Directive.

Third Energy Package Consumer Protection and Information Disclosure Duties (IDD)

The need for more effective and detailed consumer protection is reflected in the amendments made concerning consumer protection. Consumers' interests and protection measures are in the centre of this bouquet of directives and effort is made to empower consumers in the new competitive context (TEP's Electricity Directive, recitals 41.a, 41b). The art.3 provisions and Annex A of the Second Energy Directive have been changed to some extend. In the respective article of the TEP's Electricity Directive vulnerable consumer protection has been extended so that it contains the concept of energy poverty (art. 3.5, 3.5a). Moreover the TEP's provision insists on the consumers' right to choose a supplier registered in another member state and the obligation of member states not to discriminate against such undertakings (3.3a). In paragraph 3.3b the TEP adopts measures that facilitate supplier switching.

A rather important addition is the obligation of the member states to adopt an out-of-court dispute solving procedure for consumer complaints and an independent mechanism - namely consumer ombudsman or consumers' body. Furthermore the article 3 insists in procedures informing consumers about options in the newly competitive supply market (TEP, art.3.6.ba,3.7.b,3.9.a). Moreover in an attempt to empower the NRAs the TEP strengthens their authority in the consumer protection field giving them the role of an active player. The NRAs under the TEP are responsible for monitoring the efficiency and effectiveness of the market opening and competition in the retail market including complains from household consumers and to scrutinize restrictiveness of SFC. At the same time they are called to respect the contractual freedom of the parties in regards to long term and interruptible supply contracts on the condition that they are compatible with the European law and EU policies (TEP Electricity Directive, 36.1.i). Another point that is useful to be mentioned but not directly referring to consumer protection is the TEP's persistence on regulatory coordination

and cooperation. What is striking about the third electricity directive are the extensive information disclosure duties (IDD) that it sets to suppliers.

DIRECTIVE 2009/72/EC **ANNEX I** **MEASURES ON CONSUMER PROTECTION**	
Stricto Sensu Consumer Protection Measures	**IDD through Billing or Web**
protection against unfair/misleading selling methods	Supplier's identity and address
no charge for switching	Service quality levels provided, time for the initial connection
prohibition of non-contractual barriers to the exercise of customers' rights	types of maintenance service offered
difference in terms and conditions shall reflect the costs of supplier in payment	up-to-date information on tariffs and maintenance charges
fair and transparent general terms and conditions	duration, renewal and termination conditions
good standard of service and complaint handling by provider	whether withdrawal from the contract without charge is permitted
wide choice of payment methods	compensation and refund arrangements which apply if service quality levels are not met
	procedure for settlement of disputes
	consumer rights information
	notice of any intention to modify contractual conditions
	information about their right of withdrawal
	notification of any increase in charges
	transparent information prices and tariffs and on standard terms and conditions
	information about rights regarding universal service
	have at their disposal their consumption data

	are properly informed of actual electricity consumption
	the party responsible for data management shall be obliged to give those data to the undertaking

Table 1*: Stricto Sensu Consumer Protection Measures vs IDD. The choice made by the European Regulator is clear: information and transparency is more important than paternalistic protection*

2.3 The 93/13/EEC Directive

Competition in the retail energy market is expected to be rather beneficial for the energy consumers. Before the introduction of competition their main protection against the unfair clauses in their electricity contracts was the UTDirective. The UTDirective declares invalid the clauses contained in SFCs (electricity consumer contracts are SFCs) on the condition that they cause significant imbalance to the rights and obligations of the parties to the detriment of the consumers (UTDirective, art.3.1). The directive contains a list of "grey" clauses that is suggested that cause "significant imbalance" to parties' rights and obligations. The Directive's provisions are applicable on contracts offered by both State Owned and private owned enterprises (R. Christou, 2005, pg136). Thus the UTDirective was the main protection that consumers had against unfair clauses in electricity contracts.

Besides the list of the clauses, an important provision in the UTDirective is the definition of the eligible consumer. The directive follows a traditional legal approach to the consumer notion. Therefore small business consumers are not eligible and consequently do not enjoy the protection of the UTDirective. As analyzed, this approach is not based on economic analysis. The view that small business consumer has the incentives to read and is capable to understand every SFC that she signs it is not shared by economic theory.

2.4 A Concluding Review of the Legal Framework

The first point that is striking about the TEP is the persistence on detailed and extensive disclosure duties through billing and internet (at least seventeen IDD vs seven stricto sensu consumer protection provisions). A second significant amendment is the strengthening of the NRAs powers in the electricity consumer protection field. A third new addition in comparison

to the Second Electricity Directive is the consumer body or consumer ombudsman responsible for consumer complains.

In regard to the UTDirective three points are important for the following analysis. Firstly the directive is an important tool for electricity consumer protection. Secondly the UTD strictly protects consumers with the traditional sense. Finally although this directive was a successful step towards the harmonization of the member states' law and regulation in the field, it did not fully achieve its goal. Member state regulation remained fragmented to a large extend, as the Commission's proposal for a directive on consumer rights states recognizes. As a result, suppliers are still reluctant in selling cross border by practicing a market entry and internal market competition is distorted raising a barrier to inter-member state trade and market entry (Commission Proposal for a New Directive on Consumers' Rights, 2008, Rec.6-8).

2.5 Member State Level Regulatory Framework

A European Directives' characteristic is that the more detailed issues are left to member states' discretion. The Electricity Directives (First and Second) and to less extent the TEP's Electricity Directive refrain themselves from being detailed. With the exception of the detailed list of suppliers' IDD, the Directives mostly set goals (contract transparency, fairness) to be achieved when it comes to consumer protection and electricity SFC regulation.

Most of the member states deemed appropriate to take sector specific paternalistic measures (CTRRCE, 2007). Sector specific authorities and governments regulate electricity consumer contracts' content in an extensive and paternalistic way. Often the ex ante approval of general clauses approach was followed. The differentiation of the approaches followed in important issues of contract regulation (who regulates, when, to what extent) had fragmented results to the actual protection that consumers enjoy.

From the European legislation and the regulatory framework analysis it seems that, when it comes to contract quality and fairness, the European level legislator-regulator relies on consumers' informed choice but the member state regulators rely on excessive stricto sensu regulation. Can competition by itself establish efficient and fair electricity market SFC?

3. The competitive supply market implications

Competition is the best regulator. If successfully introduced it acts as a form of protective shield for consumers. Effective competition in the supply market pressures electricity

suppliers to draft innovative and higher quality/value contracts. Diversification of contract terms drafted improves allocative efficiency in the retail market (OECD,2005,pg112). Each consumer can "buy" the contract term that suits her best. In addition consumers having more alternative choices can avoid inefficient/unfair terms. Consumers that buy the best contract clauses in the market lead to contract clause competition among suppliers-drafters who bid for offering better price and non price related clauses. Therefore contract quality is expected to improve. All these though under the assumption that consumers read and understand the contract offers. But does this assumption stand? Will a rational consumer devote adequate time in these tasks?

Competition in the retail market is expected to solve problems of monopoly retail markets. Firms in the competitive markets signal their contract content, diversify their contract offers and compete in contract quality. Competitive markets are generally considered to promote allocative efficiency. Indeed under three conditions: Complete markets for all commodities exist, no market participant can exercise market power, symmetric information exists in the market. Then a general optimal Pareto efficient equilibrium of the market can be reached (B. Hermalin,A.Katz,R.Craswell,2006,pp17-18). Transaction costs that are a competitive markets' endogenous problem and significantly influence contract quality, were very low in monopolistic markets. Transaction costs in the supply markets cause an information asymmetry market failure (SWR). Consequently competition by itself is not expected to convert the electricity retail market to a problem free paradise, unless all the three Pareto requirements are met, symmetric information being one of them.

2.1 Consumers in a New Role

Electricity consumers' free choice is the touchstone of the liberalization process. Much of the deregulatory attempt's success relies on the electricity consumer's rationality as a market participant. Until the nineties though, the electricity consumer did not have any active role in the electricity market neither any participation to the market decision making. Everything was arranged organized and supervised by the government and its subsidiary undertakings. The electricity consumer's role was restricted in switching things on and off (P.D.Cameron,2007,pp8-9). The until recently protected and lacking of any freedom of choice consumers are now being asked to compare and chose between various complicated offers and lengthy SFCs (B.Barton,1999,pp283-284). Consumers are asked to perform a task for which they lack the relevant capacity to some extent.

European market being a segmented one, not all the European electricity consumers present the same level of maturity. Consumers in markets with an early opening (UK, Nordic markets, Flemish region) are expected to be more educated and ready to chose the best contract in the market. On the other hand consumers in markets that competition has been newly introduced are inexperienced. Nevertheless even in member states where the electricity supply services are a highly competitive market, consumers face information problems with their SFC which are not of the best quality.

3.2 Competitive Supply Markets: A Contract Paradise?

In Great Britain the supply market can be considered mature. The deregulation efforts started in 1989 and residential consumers were able to choose by 1998. Switching rates for household consumers are steadily over 40%. In addition consumers that do not change supplier do that as a deliberate choice and not because of insecurity or inertia (ERGERG Switching Report,2005,pg45). In 2007 there were 23 electricity suppliers 7 of which had more than 5% market share. (Eurostat European electricity market indicators,2007,pp3-4) The profit margin of these companies represents a fraction under 5% of the whole electricity price and is one of the lowest in EU (EC Third Electricity Market Benchmarking Report,2004,Price Breakdown). All these facts show that the electricity market in UK is a highly competitive one. Even in this market the information that consumers have in relation to contractual clauses and general conditions offered is not satisfactory. According to the 2008 BEUC report on electricity retail market UK is surprisingly one of the member states that consumers face problems in obtaining information in regards to their contractual clauses (BEUC report, 2008, pg 9).

Electricity consumers in other competitive electricity supply markets face the same challenge. Norway, Sweden and Finland are three other countries with more than 10% annual consumer switching. All of them proceeded in an early liberalization for the residential and small business consumer (1991,1999,1998 respectively). In Norway a main category of complaints that enter the dispute settlement mechanism concerns electricity consumer contracts. Also in Finland one of the two main categories that are handled by the Consumer Complaint Board is electricity contracts (ERGEG consumer protection report, 2005, pg35). These data show that even under competitive conditions consumer face information problems in relation to their electricity contracts. Moreover they show that although amelioration in contracts' quality is expected, competition by itself is not able to provide the best contract quality.

Indeed special Eurobarometer 219 (2005) shows that 20% of the European electricity consumers consider that their electricity contracts is unfair. Consumers' satisfaction from their contract content seems to be relevant to the supply market competitiveness. Italian and Greek consumers that at the time were not eligible to exercise freedom of choice are the most unsatisfied and more than 40% of them consider their contracts unfair. Nevertheless in countries that had already liberalized electricity supply market consumers' lack of satisfaction is still significantly well above the average. Surprisingly in Sweden and Spain 27% of the consumers see their contracts' content as unfair. Moreover 40% of Swedish and 27% of the Danish consumers are not satisfied with the information they obtain from their contracts' and bills' content, while the European average is 16% (Special Eurobarometer 219 Annexes, 2005,pp60,68).[1]

3.3 Information Costs and SWR in the Liberalized Electricity Supply Market.

Here is important to approach the data presented above from an economic perspective. The contract quality has improved but still there are information and fairness issues in regard to the electricity SFC. Nevertheless as shown earlier contract quality is not optimal and unfair clauses are still there. Information is difficult to obtain and consumers are not satisfied with their contract quality and transparency. It is counterintuitive that there are cases of countries that are the pioneers in electricity supply services' liberalization and still contract quality is an issue.[2] Consumers are confronted with a new challenge; information and opportunity costs in the form of searching, reading, evaluating the content of contracts available.

3.3.1 Switching Errors?

In the pre-liberalization era captive consumers just signed the only contract available in the market. Price was regulated at cost and non price contractual clauses served "public interest". In competition era there are tens of offers in the market and consumers are free to chose and sign the contract of their choice. In order to do so consumers have to search and compare between the contracts offered. Contracts' content varies and even price related contract terms vary a lot. Rational behavior is of outmost importance. Using their rationality electricity consumers do not only manage to find the best offer in the market but at the same time they

[1] The consumers' perception that contracts are unfair is more than an indicator for contract quality. Consumers' perception that contract quality is not good is an essential element of the Signing without Reading problem. As analysed in section 2.1.2 consumers do not expect that the contracts they sign are of good quality and thus demand for quality contracts decreases. This phenomenon reproduces itself in a vicious circle.

[2] A concurrent explanation could be that in those countries consumers are more demanding and more ready to complain about their contract quality and to start a dispute settlement procedure than the less liberalized countries' consumers.

benefit the rest of the consumers by making the market mechanism function monitoring the contract quality (positive externality).

Price comparison may seem easy and is facilitated by the NRAs and sector specific consumer boards that publish information concerning electricity prices offered by various suppliers. Energy Watch in UK, the Watch Dog of the NRA's E-control site in Austria, the Swedish Consumers' Agency in Sweden, the competition authority in Norway and in Finland and Denmark the individual retailers or their associations are responsible for providing this information relating-among others- to prices to consumers.[3] Consequently when it comes to price related issues consumers can obtain the relevant information easily. Having knowledge of the prices it is easy to employ their rationality, compare between simple numbers and choose the cheaper offer in the market (OECD, 2005, pg111).

Consumers though do not "*seem"* to act rationally. The Austrian competition authority in a 2005 investigation in the liberalized (since 2001) electricity supply market found that there is great margin for consumers to switch to a cheaper supplier. A rational switching at the moment could gain to consumer up to 30% savings. Surprisingly switching was low, less than 2% per annum, and consumers that switched did not chose the cheapest contract offer (ERGEG Switching Report,2005,pg45). It was often the case that they would sign a contract with a more expensive incumbent affiliated with a regional Distribution System Operator (CTRRCE,2007,pp51-52). An explanation for this behavior can be that they were looking for a more secure choice. In terms of utility, risk adverse individuals such as household and small business consumers may have acted rationally. A risk adverse consumer values security of supply that a distributor-affiliated supplier can offer although this may be far from reality.

Same concerns have been stressed by K. Ek and P. Soderholm for the Sweden.In their research on Swedish consumers' decision making concerning supplier switching they found that the consumers' difficulty to estimate which contract offer was the best played an important role in relation to their decision not to change supplier.[4] Moreover the belief that switching would not have an impact to their actual bills was also found significant to their decision making[5] (K. Ek and P. Soderholm,2008,pp254,258).

3.3.2 Consumers' SRW - or Understanding – Electricity Non Price Related Terms: Comparison with Price Related Terms

[3] It should be born in mind that supply markets in Norway, UK, Denmark, Austria and Sweden have been fully liberalized in the sense that there are no price controls for small business and household consumers. Market is left free to reach an equilibrium.
http://ec.europa.eu/energy/gas_electricity/doc/2008_52009dc0115_technical_annex.pdf

[4] statistically significant in the 1% significance level

[5] statistically significant in the 5% significance level

Information concerning the price related parts of the contract is relatively easy to obtain. NRAs have built up relevant databases. On the other hand non-price information is harder to acquire difficult to evaluate. This part of the contract (blur print) extensively contains sophisticated legal and technical terms.

Length and sophistication make the non price related content of SFCs significantly less intelligible than the price related. Specifically in the electricity supply market the experience of choosing between different offers and evaluating different contracts might not be a pleasant endeavor. Consumers confront the complexity of the technical issues in the non price related content and confuse by various benefits/commercial schemes (B. Barton,1999,pg284). A consumer that will not find worthwhile to invest in evaluating and comparing the relatively easy to understand prices (information that is relatively cheap to acquire) will find it less attractive to invest in monitoring the extensive vague and sophisticated non price related content of an electricity contract.

Consumers that do not switch for better prices or err when they do so, will be less tempted to invest in reading non price related elements of electricity. Information is more expensive to obtain from the blue print and the expected benefits from doing so are neither significant nor obvious. It is difficult for the unsophisticated consumer and expensive for any consumer to locate and economically appreciate the value of each non price contractual clause. For illustration it is often the case in Finland and France that electricity consumers are not aware of basic clauses in their contracts. ERGEG reports that many of them requested to switch while already being bound to a previous contract not being aware of their status and the content of their electricity contract (ERGEG Switching Report, 2005, pg34). These consumers often have to pay a penalty for the cancellation of their fixed term contract.

Transaction costs involved in finding new supplier deter many consumers from reading and comparing the contractual content. Many consumers will thus switch utilizing rules of thumb or routines (as detected in Sweden) or not at all. Consequently only a portion of consumers will actually be informed about the offers in the market and the content of the contract they finally sign. The lower the consumer's opportunity cost and changing fee the more likely the consumer will devote time in reading the contract clauses offered. Even then only a fraction of the consumers that to some extent read the contracts will actually understand. How many consumers do understand and can economically appreciate the difference between liability for foreseeable damages (UK) and liability for indirect, consequential losses (Norway)? Of those how many know how these two abstract notions are interpreted and enforced? Legal terms could very well be more understandable in relation to technical sector specific terminology. Therefore the SWR problem is not only about not reading the contract is also about not understanding it. The result is the same; asymmetric

information. SFC's content is not monitored, quality deteriorates and allocative efficiency in the market is lowered due to low quality contracts.

A rational supplier-drafter will add inefficient/unfair clauses raising consumer's informational costs making the contract content more difficult to read less transparent and more technical. Consequently, unfair/inefficient terms are still detected in the electricity consumer contracts, consumers are not happy with the information they obtain from their contracts and complaints regarding contract quality frequently reach the dispute settlement boards. As shown even liberalization-pioneers countries score well above the EU average in complaints about the contracts and in lack of consumers' satisfaction concerning the contract quality.

Although monopoly problems are solved, transaction costs consumer faces have increased in the competitive environment. The fraction of the consumers that finally read and actually understand the consumer contracts are not enough to reach the contract quality to an optimal equilibrium. In the following paragraphs the maximum time a rational consumer will devote in this task is illustrated.

3.3.3 Inequality to Estimate the Maximum Time a Rational Consumer Will Devote on Contract Offers

At first glance it is difficult to understand why consumers like Swedish or Austrian behave so "irrationally". Consumers, though, can not spend infinite amount of time just for finding the best contract available. Time devoted on searching and reading involves opportunity cost. Therefore consumers will try to have the best results possible with the less time spent. The relevant 2005 OECD report points out the critical role that the transaction and opportunity costs connected with switching play in consumer decision making (OECD,2005,pg111). Is the decision not to search for information or just to search superficially and not understand the contract is an economically rational one?

An inequality is developed that illustrates that due to opportunity cost, a rational consumer will devote only few hours maximum per year in evaluating and signing an electricity contract.

The cost that consumer faces is: EC=TxW
The benefit that the consumer expects is: EB=ADxBxP
For a rational consumer EC will be less or equal with EB : $TxW \leq ADxBxP$

Austrian average electricity household consumer example: ***B**=50euros (assumption 2/3 of the total household energy expenditures)* ***AD**=15-30%=22.5%=0.225, **W**=12€/h (1600€, 35h/week), **P**=0.6 -0.9 (Assumption)*
Inequality is solved: *12€/h x T ≤ 0.225 x 50€/month x 0.6 (not so optimistic) →* *12€/h x T≤6.75€/month → T ≤0.56h/month →(x12/12) → T ≤ 6.7h/year*
12€/h x T' ≤ 0.225x50€/month x 0.9(optimistic) → *12€/h x T' ≤ 10.125€/month →T' ≤ 0.84h/month →(x12/12) →T' ≤ 10.08h/year*

Table 1: Time is a scarce resource for consumers. The average Austrian consumer will not devote more than 10.08 hours per year in reading comparing and switching due to the opportunity cost involved.

*Symbols: **T** is the time the consumer devotes in switching, evaluating and signing activity in hours. **W** is the wage per hour that the electricity consumer would gain instead of searching and is used as a proxy for opportunity cost (marginal per hour). **P** is the consumer's estimation of the probability that her effort to find a better contact in the market in terms of price will be successful. **AD** is the average percentage of discount per month the consumer gains signing one of the most attractive in price contracts. **B** is the amount of money the consumer is currently paying for her electricity bills per month. An optimistic consumer expects a more successful result, a not so optimistic consumer expects a less successful result. **WxT** opportunity cost the consumer faces in total (marginal 1/h x time h). **EB** expected benefits per month.*

3.3.4 The Average Austrian Consumer Example

The example of Austria is helpful for illustration.[6] Astrian average gross wage is 1600E. According to the 2004/2005 Austrian Household Budget Survey, the average monthly household's expenditures for energy were 117E representing 4.6% of household's total expenditures (Statistik Austria,2005,pp1-2). Personal expenditures per adult living in the house were 76E representing 4.7% of adult's total personal expenditures. Under the

[6] Austria is seventh in GDP per capita in European Union and forth in comparison to the other early liberalization countries (six in total) (The World Bank World Development Indicators database, 2007: http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP.pdf and http://siteresources.worldbank.org/DATASTATISTICS/Resources/POP.pdf Moreover it has the sixth best score in the corruption perception index in EU and third among the early liberalized markets (Transparency International Corruption Perception Index, 2007). Being a developed country but not in an extreme of neither corruption nor GDP gives the ability to generalize to some extend from its case study.

assumption that only a part of this expenditure goes for electricity bills, and for illustration purposes an assumption is made that the energy expenses is 2/3 electricity 1/3 gas. This lowers the electricity expenditures *(B bills)* to 50E representing the 3% of the personal expenditures per average Austrian adult. At the same year the report of the Austrian competition authority evaluated the cost saving (*D discount*) margin gained by a potential supplier-switch in something between 15%-30% of the electricity bill (CTRRCE, 2007, pp51-52). The Austrian electricity consumer of the example has to decide the maximum amount of time she will devote in searching for a better contract.

Being rational, consumer knows that she can save 15-30% of her electricity bills by switching. The average discount *(AD)* that she can achieve by switching is then 22.5%. In order to gain these savings though, she will have to be successful in switching and find a good offer if not the best. On the other hand she knows that she has to undergo some expenses in terms of opportunity costs. In 2004-2005 Austrian consumer can potentially save 7.5 – 15E per month -11.5E on average- from billing *(this is ADxB)*. She needs though to search for hours to find the best price then contact the new supplier and wait from 5-8 weeks to finally switch (ERGEG Switching Report,2005,pp18). Due to electricity price volatility this can happen more than once per year so that the Austrian consumer can enjoy constantly one of the best contracts in the market.

At the right side of the inequality is the average gain p/m expected from a switch multiplied by 12 so that the maximum time that is devoted in contract evaluation and switching is estimated per year. To the left is the income (marginal 12€/h) she gains from her work multiplied by time T (h) devoted in searching, switching, reading the contracts and signing a new one. The maximum amount of opportunity cost she will be willing to undergo is equal to the expected benefit. Solving the inequality it is found that a rational Austrian consumer will devote 11.2h maximum p/y in searching, contracting and switching. This estimation is based on the assumption that she expects her searching to be perfectly successful which is not certain.

Due to contractual clauses' lack of transparency, information scarcity – or information overload - there is the probability P that the consumer will expect to err and not to choose the best offer. With a modest estimation and the P being between 0.6 and 0.9 the consumer would be ready to spend 6.7 to 10.08 h maximum p/y. This is rather limited and refers to the average consumer. Worse paid consumers or consumers that spend more money in electricity consumption will devote more time in max.[7] On the other hand better paid consumers will

7 This partially explains the larger switching percentage in Nordic countries. Electricity expenditures represent a larger portion of the household budget due to high shares of electric heating. This view is also shared by OECD 2005 report (OECD, 2005, pg113).

devote less time. P is the only variable of the aforementioned in the inequality above that can be controlled – to some extent – by NRAs and the regulatory framework. The regulators can "help" consumers devote more hours "regulating" electricity SFC by increasing P's magnitude.

Consequently from an economic perspective SWR price related clauses carefully or staying in an inefficient contract could be (and often is) a very rational choice made by the average Austrian household consumer. That stands even if she had one of the worse contracts in the market and the discount margin was 22.5%. It is thus in many cases a rational behavior for the household electricity consumers to utilize routines and rules of thumb in their effort to economize their scarce time and cognitive resources. As K. Ek and P. Soderholm point out, consumers in such conditions will make decisions that are just satisfactory. Searching for the best contract in the market is too expensive for them (K. Ek and P. Soderholm,2008,pg255).

Electricity bills represent only a small fraction consumer's household expenditures; consumer expects only a small improvement in her income from switching. Therefore consumers will not invest too much in evaluating available contracts. A household electricity consumer that invest a lot of time in reading contracts (especially the non price terms) may found herself spending a lot with a low rate of return. As long searching, switching, signing costs are higher than the expected benefits, the consumer will switch without being informed or may not switch at all. Following this reasoning both consumer inertia and contracting a less efficient supplier are rational.

On the other hand the electricity expenditures represent a large portion of the medium and large industrial consumers' expenses. Industrial consumers have better incentives to for an in depth evaluation of available offers. Taking these facts into account it is not a surprise that industrial consumers switch more often (more than 50%) and enjoy better electricity prizes and contract clauses than the household/small business consumer of the same country (OECD, 2005, pg113).

This inequality evaluates the maximum amount of time devoted by a consumer in her effort to find better price terms. It can be used to estimate the maximum time that will be rational to devote reading and comparing the non price terms between available contracts. As analyzed reading and understanding non price terms is more difficult and sophisticated task than price related term. Moreover it is far more difficult (in terms of consumer's sophistication) and far more costly (in terms of opportunity cost) to read and economically appreciate the value of each non price related clause. The margin of benefit from reading each non price term is vague and often trivial. Therefore the maximum amount of time and effort that the average Austrian consumer is expected to spend for the evaluation of the non price

related contract content is significantly lower. The evaluation of the non-price related content though, is decisive for the contract quality since unfair/inefficient clauses are found there.

Of course this model has a main limitation. It only estimates the maximum amount of time that an average consumer will devote in reading and evaluating contracts taking into account her opportunity cost. It mainly shows that consumers' time is a scarce resource. Since the expenditures for electricity represent a small fraction of the household expenditures, a rational consumer will not spend much time in reading and comparing contracts. The same stands for non-price terms; the consumer will try to undergo lower opportunity cost than the expected benefit from better non price clauses (such as liability, renewal and length). Devoting time in price terms consumers set competitive pressure on the prices making price competition work. Devoting time in non-price terms consumers promote non-price competition. The more effectively consumers spend their limited time in reading and thus monitoring non-price terms the less severe the SWR will be. The more informed the consumers are about contracts' content the more they monitor it and thus better contract quality is expected. Informed consumer's choice is a precondition for symmetric information between market actors to be established.

Nevertheless different consumers in the same market can have different results when searching for available contracts even if they devote the same amount of time. The result depends on the transaction costs in the market and the consumers' maturity/experience. Consumers of the same sophistication in different market environments would also have different results. The transaction costs that consumers face and the contract transparency they confront are not the same in every market. Nevertheless authorities can help. This can be achieved firstly by obligatory IDD through contracts, by making contract information more accessible and easy to compare and secondly by guaranteeing a minimum clause quality regulating obligatory contractual terms.

4. Effectiveness and Efficiency Evaluation of the Legal and Regulatory Framework

In order to answer the ancillary questions set it is useful to start by evaluating whether the regulatory and legal frameworks are effective and efficient in promoting competition mostly by deterring SWR. After answering the ancillary research questions, it will be possible to proceed to conclusions in respect to the main research question.

4.1 Effectiveness and Efficiency in Regard to Retail Competition Goal

Authorities can help consumers use their limited time efficiently in monitoring contract content, setting conditions so that consumers will use the same limited amount of time input and have better results in acquiring information as an output. A way to achieve this is by information disclosure as a way to increase the magnitude of the **P** variable in the above presented inequality. Suppliers' disclosing duties help consumers read contracts and acquire information from their content more easily. Moreover suppliers' obligation to publish the contract content (price and non price related terms) on internet makes it easier for the consumers to have access to the contract content and to compare equivalent clauses in different contracts. Furthermore regulating the non-price contract content excluding inefficient clauses helps consumers to focus on the rest of the content and mainly on the price related clauses. Firstly it is examined whether the IDD, as mandated in European level legislation-regulation (Second Electricity Directive and the TEP Electricity Directive) and member state level regulation, are efficient and effective in promoting competition.

4.1.1 Promoting Competition through IDD

The disclosure duties mandated by the TEP have been presented. Specifically IDD cover at least the identity and address of the supplier, the time of initial connection, the type and the quality of the services provided, type of maintenance offered, information about the maintenance charges and tariffs, the duration and the renewal of the services and of the contract, the existence of any right of withdrawal from the contract, the existence of any compensation for low quality and the existence of any dispute resolution procedure (Annex A). Information duties are at least seventeen and can be viewed as rather detailed. The measure at first sight seems disproportional and the objective pursuit is not very clear.

4.1.1.a Disclosure through Contracts Effectiveness of the Measure

From economics perspective, though, the objective pursuit is clear. The European legislator/regulator promotes electricity consumers informed/rational choice. The list of disclosure duties is referring to the most important elements and clauses of a contract. The European directives make sure that the information concerning the most important elements of an electricity agreement are found in the small consumer contracts and are presented in an intelligible-transparent way. Moreover the TEP is promoting informed choice by mandating that consumer access to the information listed above prior to the conclusion of the contract. By promoting consumers informed choice information asymmetry is deterred between

suppliers-drafters and electricity consumers. Thus the extensive and detailed information disclosure is not disproportional. The objective is clear (informed electricity consumers) and the measure used is targeting directly to this. Extensive IDD is employed by the sector specific contract regulation as a way to increase the magnitude of the **P** variable in the above presented inequality. The disclosure's extensive and detailed character is employed to secure its effectiveness as a measure.

A reader acquainted with legal studies would expect as consumer protection a detailed list of paternalistic consumers' rights. On contrary the directive focuses mostly in IDD. As illustrated information asymmetry due to transaction and opportunity costs deteriorates contract quality and the consequent (price and non price) competition between contract offers. Although it is rather surprising that consumer protection mostly consists of an IDD list, from economics perspective it is a most rational regulatory choice. It is a rational choice that is performed in an effective way; the duties are many in number, detailed and they cover the main fields of an electricity supply agreement. Therefore disclosure duties can be deemed as an effective measure in deterring the SWR.

4.1.1.b Disclosure through Contracts Efficiency of the Measure

The choice for information disclosure is not only an effective one but also an efficient one. Symmetric information between suppliers-drafters and consumers is a necessary requirement for competitive market to be Pareto efficient. If market suffers from information asymmetry problems such as the SWR, it will not reach in an optimal equilibrium (B.Hermalin,A.Katz,&R.Craswell,2006,pg17). Therefore symmetric information in the market (or in the real world as symmetric information as possible) is a requirement for competition to work. IDD can help a more allocative efficient equilibrium to be reached. But not every sort of information can be cheaply acquired or cheaply disclosed. Thus scholars like Kronman and Katz suggest that IDD should be set at least for the information that is easily and cheaply acquired (B.Hermalin,A.Katz,R.Craswell,2006,pg63).

Indeed the disclosure duties set by Annex A refer to information supplier-drafter already possesses or can easily and cheaply acquire. Most of the duties refer directly to supplier's identity and to characteristics of the specific agreement to be signed. The supplier-drafter can cheaply acquire this information and cheaply transmit through contracts. Economies of scale that exist because of SFCs mass production further lower the cost for transmitting this information to each consumer. Some of the disclosure duties namely the existence of any right of withdrawal from the contract, the existence of any compensation for low quality and the existence of any dispute resolution procedure do not directly refer to the specific content

of the agreement or the supplier's characteristics. Nevertheless supplier can easily acquire information related to these issues, because the supplier being more sophisticated and acquainted with the sector specific regulation can easily find the relevant rules and inform consumers through contracts.

IDD are also efficient in respect to the party of the contract that is obliged to acquire and disclose them. One of the parties (supplier/drafter or consumer) has to undergo the relevant information costs involved as a condition for the market to be allocative efficient. It is socially more efficient if the party that acquires this necessary information more cheaply to be obliged with the acquiring and disclosure duty. This choice is compatible with the economic analysis of contracts and contract regulation. Information asymmetry should be addressed by setting the burden of information to the party that can undertake it more cheaply (B.Hermalin,A.Katz,R.Craswell,2006,pg94).

Suppliers can undertake the burden of informing consumers about its personal characteristics than consumers searching on their own. In respect to the disclosure duties that do not relate specifically to the suppliers characteristics or the specific agreement, the supplier can also undergo those expenses cheaply. Supplier acquires this information once and then transmits it to each consumer. If the consumers were to acquire this information on their own, the total social cost would be huge. Consumers are more numerous and each of them can acquire this information more expensively than the supplier; each individual consumer information expenses have to be multiplied by the number of consumers in order to estimate the total social expenses. Annex A provisions are, thus, economically efficient in two ways: **Firstly the disclosure duties set refer to important information for informed choice to be achieved but at the same time information that is cheap to acquire and disclose. Secondly the party that is obliged to disclose, is the party that can undergo the costs of acquiring the information more cheaply: the supplier.**

4.1.1.c Disclosure through Publishing on Websites and Bills

Contract content and information concerning their rights are more accessible to consumers. Accessibility lowers the opportunity costs that consumers undergo. Publishing information in the web is a practice so far mostly focused to price related content. Authorities and consumer bodies have used this practice in order to help consumer acquiring relevant information. Energy Watch in UK, the Watch Dog of the NRAs E-control site in Austria, the Swedish Consumers' Agency in Sweden, the competition authority in Norway, in Finland and Denmark the individual retailers or their associations are responsible for publishing information relating-among others- to prices.

TEP's Annex A sets a new on-line publishing obligation for the information that relates to disclosure duties (par.a). Contract content and consumer rights on-line publishing obligation was not set before. This measure significantly lowers the time that a consumer needs to gather contract offer information via the web and compare it. Symmetric information is promoted and SWR is further deterred. Information publishing through internet, though, can not be used by every consumer. Not every consumer has access or is able to use the web. Nevertheless most of the European consumers are now to some extend familiarized with the use of internet. The argument that acquiring information via the web is a task that only sophisticated consumers can perform does not stand today as it would ten years ago. Therefore this amendment that annex A introduces is a valuable addition to consumers' weapons in their fight for acquiring contract content information in the liberalized electricity supply market.

4.2 Effectiveness and Efficiency in Regard to Consumer Protection Goal

TEP sets an obligation for swift and effective sector specific dispute settlement. Thus all the member states that did not yet opt for this solution are now obliged to. Concerning the consumer protection goal the dispute settlement bodies help the consumers have a quick solution for their problems. If it is taken into account that electricity is an unsubstitutable commodity and that a modern household cannot do without electricity[8], swiftness in solutions is important for consumers.

The new legislation potentially awards small business consumers with protection that household consumers enjoyed. The UTDirective as already analyzed protects only the traditional "consumers", household consumers. Thus under the previous regime small business consumers that did not present any special sophistication or special incentives to read the contracts remained unprotected. This view of the business people as sophisticated and omniscient is not shared by behavioural economics' analysis nor is proven by empirical evidence. Indeed Andrew Robinson presents an extensive list of empirical evidence that show that business people (probably with the exception of large dollar purchasers and vendors) do not read nor understand the content of SFCs (A.Robinson,2005,pg7). Especially when it comes to electricity SFCs small business electricity consumers are as vulnerable to unfair/inefficient terms as household consumers. The paradox occurred that the same person

[8] Electricity presents close to zero price elasticity for demand. R. Lafferty et al in an extensive research in electricity supply market found both Time of Use and non-Time of Use electricity household and small business demand responsiveness to be rather inelastic. Specifically for household consumers price elasticity was found to vary from 0.2 in the sort run to 0.5 in the long run (R. Lafferty et al, 2001). These figures are rather extreme in magnitude and make electricity one of the most unresponsive to price commodities. According to Eurostat Electricity usage penetration to households is no less than 100%. (Eurostat report on consumers' views on service provider switching, 2009, pg 4)

was protected when buying electricity for household consumption while not protected when buying electricity for her small business consumption.

In France for instance consumer protection in relation to electricity contracts has been repeatedly denied to small business owners such as a dairy store (Ar. CDA deBourges,25/11/1992), an egg hatching facility(CDA deGrenoble,16/01/1996), a small chicken farm (CDA deRennes,10/04/1996) and a fish breading business (CDA deParis, 14/06/1996)[9] because they did not share the naivety and vulnerability of the household consumer, although both groups face information asymmetry problems and are part of SWR that consequents to contract quality deterioration. Small businesses electricity consumers were practically unprotected against unfair terms. Under the new legislation this economically unjustifiable discrimination will cease to exist.

5. Conclusions

A test evaluating the effectiveness and efficiency of the sector regulation has been built. The criteria used for the evaluation of the regulation have been introduced and justified. After the benchmark test was built, the regulation under evaluation was presented. The European level legislation-regulation was analysed. This analysis mostly focused on the provisions and rules that concern the consumer protection and the electricity consumer SFCs' regulation specifically. The newly introduced TEP Directives' amendments were illustrated mostly focusing on IDD.

This research report paid special attention to the analysis of the electricity competitive retail market. As shown in the relevant section competition has its own implications in relation to contract quality. Searching costs, reading costs and signing costs that emerge in the competitive market do not allow consumers to devote adequate time in monitoring the contract content in order to choose the best from both price and non-price perspective contract offer. It was shown that a rational consumer will balance the costs she undergoes and the benefits she expects. Therefore she will not devote more than few hours per year in evaluating and comparing price related terms of the contracts and signing the best of them. The non-price terms are more time demanding to read and more difficult to understand than the price terms thus less time is expected to be devoted in their reading. The expected benefits from this task are less certain and lower in magnitude. As shown consumer will tend to sign contracts utilizing rules of thumbs and/or routines when asymmetric information problem is strong.

[9] After Inquiry in the Database of Clauses Abusives Available free of charge (French) at: http://www.clauses-abusives.fr/util/index_recherche.htm

Consumers are involved in contracts that do not read and/or understand. This problem-market failure is SWR or "contract market for lemons". As analysed in section one, rational drafters knowing that consumers-or at least a significant fraction of them-is not aware of the contract content they sign, will tend to add inefficient unfair clauses that benefit them as suppliers. Consumers do not expect to sign good quality contracts. Demand for contract quality decreases and consequently allocative efficiency and contract innovation in the market. The contract quality is detected as a problem in various markets. Severe consumer's lack of trust and confidence about the content of the contract they sign is diagnosed and unfair terms are found even in member states that performed an early liberalization of the electricity retail market. Although that this fact is surprising it is explained by SWR analysis. Thus competition by itself can not lead to a contract quality equilibrium that will guarantee a close to optimal level allocative efficiency in the retail market. Therefore regulation has to be employed.

The sort of regulation employed is rather important. The European level legislation-regulation and the member state level regulatory frameworks are evaluated in regard to their effectiveness to deter the SWR and facilitate actual competition (price and non-price) in the retail market. The regulation is also examined in relation to consumer protection.

In respect to the competition objective the European level regulation is effective in deterring SWR through extensive information disclosure. The European level regulation opted for facilitating consumers informed – rational choice rather than establishing a paternalistic regime of protecting measures. The measure is proportionate, easy to comply and relatively cheap to enforce. It moreover leaves to member states discretion the adoption of consumer protection and contract regulation measures that are suitable to their specific need and to their level of market and consumer maturity. Furthermore information disclosure is not intrusive to the parties' contracting freedom. Finally the disclosure duties are assigned efficiently to the parties and are consistent with the economic analysis of contracts theory.

In regard to consumer protection the Third energy Package makes a step forward. The inclusion of small business consumers to the scope of the consumer protection measures is a positive step from an economic perspective. When it comes to electricity supply small business consumer are not different in sophistication or market power from the residential consumers. Thus differentiation was not economically justified. Nevertheless small business protection and contract regulation rests on the member states discretion. Moreover the obligation that the TEP sets for member states to establish dispute settlements mechanisms for the consumer complains is a measure that is found effective in regards to both consumer protection and introduction of competition goals. It is effective for consumer protection because it provides swift solutions to their problems given by an expert body. It is efficient

because it deters the uncertainty about the existing rules in relation to the electricity consumer contracts' regulation and therefore facilitates competition. Finally, if appealed, dispute settlement decisions can illuminate the general judges providing them with an expert view that raises market specific economic concerns.

Concluding, electricity contract regulation is rather effective and efficient in achieving introduction of competition in the market, and consumer protection. It is not intrusive to the contracting freedom, it is relatively cheap because it relies mostly on information disclosure and promotes consumers informed choice battering the information asymmetry without setting a heavy burden on the market. The informed choice approach through information disclosure is neither the easy nor the quick way to deter SWR and improve contract quality. The easy and convenient way would have been an adoption of heavy paternalistic consumer protection. Under the current regime it may take a while before electricity consumers learn how to function in a liberalized landscape and reach to the expectation of the European regulator performing their new role. Nevertheless it is the correct way to proceed because it helps the consumers to develop their skills in a competitive market, choose the best offer and apply competitive pressure to suppliers. Problems are encountered though mostly in the level of harmonization of the member states' markets. Segmentation functions as a barrier to entry. The regulatory coordination that is instituted with the TEP is a positive amendment but of uncertain results.

List of Scientific Literature:

Akerlof, G. A. (1970), "The Markets for 'Lemons': Qualitative Uncertainty and the Market Mechanism", 84 *Quarterly Journal of Economics*, 488.

Austrian Federal Competition Authority (2004) *"General investigation of the Austrian Electricity Industry"*

Austrian Competition Committee (2008) *"Annual Report on Competition Policy Developments in Austria"*

BEUC (2008) *"The EU Energy Markets after the liberalisation: Consumers still waiting to reap the full benefits"* Ref.: X/60/2008/22/10/08

Baldwin, Robert and Cave, Martin (1999) "Understanding Regulation: Theory Strategy and Practice" ISBN:978-0-19-877438-9

Barton, Barry (1999) Applied Energy "*Risk and promise in energy market liberalization: consumer choice in buying electricity*" Applied Energy 64(1999)275±288

Cameron, P. D., (2005) *"Legal Aspects of the EU Energy Regulation"* Oxford University Press ISBN:0-19-927963-2

Christou, R. (2005) "Boilerplate" Sweet & Maxwell ISBN:0421898909,9780421898905

Commission proposal for a directive of the parliament and of the council on *"consumers' rights"* COM(2008)614final2008/0196(COD)

Cooter, Robert and Ulen, Thomas (2008) "Law and Economics" Fifth Edition ISBN:978-0-321-52290-0

Database of Clauses Abusives Available free of charge (*French):http://www.clauses-abusives.fr/util/index_recherche.htm*

Den Hertog, Johan A. (1999) *"General Theories of Regulation",* in *Encyclopedia of Law and Economics*, B. Bouckaert and G. De Geest (editors),

DeGeest, Gerrit (2002), *'The Signing-Without-Reading Problem: An Analysis of the European Directive on Unfair Contract Terms'*, in Schäfer, Hans-Bernd and Lwowski, Hans-Jürgen (eds.), *Konsequenzen wirstschaftsrechtlicher Normen*, 213-235

Flash Eurobarometer (2009) *"Consumers' views on switching service providers Summary"* FlashEBNo243

Electrabel company's key figures, 2007

Euro-barometer 219 (Special) (2004-2005) "*Consumers Opinions on Services of General Interests*" Office for Official Publications of the European Communities ISBN:92-894-9024-1

EdF Group Annual Report (2007)

ERGEG (2008) Hungarian Energy Office 2008 Annual Report to the European Commission

ERGEG (2008) Danish Regulators'2008 National Report to the European Commission

ERGEG (2006) "Customer Protection: An ERGEG Best Practice Proposition for Public Consultation" Ref:E05-CFG-03-06

ERGEG Irish CER 2008 Regulators' Annual Report to the EU Commission

ERGEG (2005) "ERGEG Report on Customer Protection" Ref:E05-CFG-02-05

ERGEG (2005) "ERGEG Report on the Customer Switching Process" Ref:E05-CFG-02-06

ERGEG Czech Republic's National Report on the Electricity and Gas Industries for 2007

ERGEG (2008) Portuguese ERSE (NRA) Annual Report to the commission

ERGEG (2008) The Swedish Energy Markets Inspectorate's report as per EC Directives for the internal markets for electricity and natural gas, 2008

ERGEG (2008) Ofgem 2008 National Report to the European Commission

Eurostat(2009) *"European electricity market indicators 2007*" Data in focus 12/2009

Ek, K., Soderholm, P (2008) "Households' switching behaviour between electricity suppliers in Sweden" Utilities Policy 16 (2008) 254–261

EC (2004) *"EC 3d electricity market benchmarking report, 2004, price breakdown"*

Greek Consumer Ombudsman (2008) "Annual report June 2007- May 2008"

Hatzis, A. N. (2008) *"An Offer you Can not Negotiate"* in *"Standard Contract Terms in Europe: A Basis and a Challenge to European Contract Law"* Edited by Hugh Collins ISBN:978-90-411-2784-6

Hermalin, B. E., Katz, A. W., Craswell, R. (2006) *"Chapter on the Law & Economics of Contracts" in "The Handbook of Law & Economics"*

Kaplow, L., Shavell, S. (2003) *"Fairness versus Welfare: Notes on the Pareto Principle, Preferences, and Distributive Justice"* Chicago School Journals, The Journal of Legal Studies, vol. 32 (January 2003)

Katz, Avery Wiener, (1998) *"Standard Form Contracts" in "The Palgrave Dictionary of Economics and Law"* Peter Newman

Kessler, Friedrich, (1943), *"Contracts of Adhesion: Some Thoughts about Freedom of Contract"* Columbia Law Review 629

Lafferty Ronald, David Hunger, James Ballard, Gary Mahrenholz, David Mead, Derek Bandera (2001) "*Demand Responsiveness in Electricity Markets*" Office of markets, tariffs and rates

Organization for economic co-operation and development (OECD) (2005) *"Lessons from liberalized electricity markets"* IEA

Pfeiffer, T., M. Ebers (2007) *"Non Negotiated Terms: Validity of Terms"* in Aquis Group *"Contract I: Pre-Contractual Obligations, Conclusion of Contract, Unfair Terms*" ISBN:978-3-86653-023-2

Posner, R.A. (1992)*"Economic analysis of law",* 4th edn. Boston: Little, Brown and Company.

Posner, R.A, (1975) *"The Social Costs of Monopoly and Regulation"* Journal of Political Economy, University of Chicago Press, vol. 83(4), pages 807-27, August.

Proposal for a Directive of the European Parliament and of the Council on Consumer Rights Brussels, 8.10.2008 COM (2008) 614 final 2008/0196 (COD)

Robertson, A. (2005) *"The Limits of Voluntariness in Contract"* Melbourne University Law Review

Regional Technical Centre of Research on European Consumption (CTRRCE) (2007) "Energy regulation and consumer interests"

Schwartz, A. (1977), "A Re-examination of Nonsubstantive Unconscionability", 63 Virginia Law Review, 1053.

Statistics Austria(2005)*"Household Budget Survey 2004/05"*

Stern, J., Cubbin, J. (2005) Regulatory Effectiveness: *"The Impact of Regulation and Regulatory Governance Arrangements on Electricity Industry Outcomes"* World Bank Policy Research Working Paper 3536, March 2005

Todd D. Rakoff, (1983) "Contracts of Adhesion: An Essay in Reconstruction", 96 HARV. L. REV. 1173, 1184-86

Transparency International(2008)"Corruption Perception Index (CPI) 2008 review" http://www.transparency.org/policy_research/surveys_indices/cpi/2008

UK Energy Supply Ombudsman(2008)"UK Energy Ombudsman report on Customer Satisfaction"

UK Better Regulation Task Force (UKBRTF),(1997)*"Principles for Good Regulation"*

Utton, M.(2003)"*Market Dominance and antitrust policy"* ISBN:9781845422967

Wijck, P. Van and J. Theeuwes(2000),"*Protection against Unfair Contracts: An Economic Analysis of European Regulation"*,9 *European Journal of Law and Economics*,73

World Bank World Development Indicators database, (2007):http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP.pdf