DECLARATIVITY AND EFFICIENCY IN PROVIDING SERVICES OF GENERAL ECONOMIC INTEREST. EMPIRICAL STUDY REGARDING THE RELATION BETWEEN HEATING COSTS AND BUDGET CONSTRAINTS

Dumitru Miron\textsuperscript{1}, Monica Aureliana Petcu\textsuperscript{2} and Iulia David Sobolevschi\textsuperscript{3*}

\textsuperscript{1) 2) 3)} Academy of Economic Studies, Bucharest, Romania

Abstract

Defined by each country separately, according to real options, circumstances and traditions, the services of general economic interest have an objective purpose in ensuring protection and security for population. The services of general economic interest involve both public and economic services and show characteristics of both fields, reflecting the capabilities of communities to organize, regulate and provide them. Considering the accessibility to the essential service of general economic interest of providing household heating, as an undeniable condition of consumer protection, an analysis has been made in this field, with reference to the concrete manner of providing these services. The goal of this endeavor was to emphasize the actual conditionalities induced by the budget constraints of households while ensuring the universality of the access to the essential heating service. The empirical study is based on a survey of 55 households in sector 2 of Bucharest that have access to gas heating systems, while they have different revenues and equipments. The processing of the gathered data allowed the procurement of certain indicators that explain how household revenues determine the access to the heating services and how the deficiencies of the insurance system of these services deepen the social polarization and increase the weightings of those living at the limit of subsistence.

Keywords: consumer protection, service of general interest, universality of the access to essential services, accessibility, budget constraint.

JEL Classification: D12, D18

* Corresponding author, Iulia David Sobolevschi – iulia.david@kgaudit.ro
Introduction

The structure of European society includes the achievement of a standard of living based on a set of cardinal utilities of individual households, of which all its members should equally dispose, according to their own values and aspirations and real existent possibilities, thus ensuring the social cohesion and the development of individual and society. The EU documents issued in the course of time (EU Treaty, Green Paper, White papers, Guide on services of general economic interest/2013) included the services of general economic interest (SGEI) in the set of assumed cardinal utilities, and the major obligation in this field is the universality of the access to these services, as a real measure of protection of population. An additional argument of the importance of ensuring the access, and thus the consumer protection, is the fact that the (total or partial) financing of services of general economic interest is not related to subventions, but to the State aid (the most recent document that extends the financing limit was issued in February 2013). Services of general economic interest are the direct responsibility of public authorities that are obliged to provide them on the entire territory, at affordable prices and in similar conditions of quality.

The purpose of this endeavor was to examine the extent in which this major desideratum regarding the accessibility to a service of general economic interest such as household heating, as a concretization of consumer protection, is achieved in a limited space, on a small sample, but concerning the largest diversity of household circumstances, seen from multiple perspectives: income, space, number of persons and used equipment, and to provide information on the relationships between: accessibility – protection – budget constraint.

1. Consumer protection in SGEI

The essential reasons of the organization, regulation and provision of the services of general interest require their performance while observing the fundamental right to protection and security. The guidelines on consumer protection have been established through Resolution No. 39/248/1985 of the UN Department of International Economic and Social Affairs.

“Consumer protection includes several sets of specialized activities that have as a goal to protect and preserve the bio-psycho-social integrity of a person provided with goods and services delivered or commercialized through public networks of social offer or through national market. These sets of specialized activities must be structured taking into consideration the guarantee of a balanced human development, by applying consumer protection policies against any dangers which may affect their health, security or economic and social welfare” (Stanciu, Mihaiescu, Preotesi, Tudor, 2005). Romania developed its own legal and institutional framework for consumer protection, according to the EU documents. Government Ordinance No. 21/1992 on Consumer Protection, including subsequent amendments and additions, stipulates the state’s obligation to protect the citizens as consumers through measures provided by the law, to defend and provide their legitimate rights against any incorrect practices, and to participate in the adopting of the decisions in the field (GO. No. 21/1992, including subsequent amendments). The main rights of the consumers provided by the law are:

• the right to be protected against the risks which may compromise their life, health or safety, or which may negatively affect their rights and legitimate interests;
• the right to have access to complete, correct and precise information regarding the essential characteristics of the products acquired and the services provided, so that the decision they take in this respect best correspond to their needs, as well as the right to get proper education as consumers;
• the right to have access to markets which provide a wide variety of quality products and services;
• the right to compensation, by legal means, for damages generated by the inadequate quality of products and services;
• the right to join in consumers associations for the purpose of defending their interests.

In the SGEI field, consumer protection includes: ensuring the access to the essential services, their systematic supply, material support for those facing precarious financing situations, observing the assumed quality conditions, detailed, accurate and systematic information on the field (water and gas quality reports, cost structure, substitution possibilities, price change, supply failure and motivations etc.).

**Services of general economic interest** are economic services provided by public authorities directly, or on their behalf by economic operators, based on the principles of equity, equality of access and social solidarity, provided in the interest of each individual and society in general, and fulfilling the objective of welfare and social cohesion. SGEI include services of water supply, gas, electricity, heat energy, telecommunications, postal services, transport, water and waste disposal. Even though the definition and coverage area of these services are made at the level of each EU country, the European Commission controls the way these services are entrusted to economic operators, in order to make sure that the general principles of service delivery are observed.

The performance of services of general economic interest – given the general public interest in meeting universally expressed needs and the requirements that derive from observing the human rights and from the fundamental EU goals – consists of ensuring equality of access, universality and transparency. The major coordinates of the mission are (White papers):
• universal access to essential services (including for those who cannot purchase them for financial reasons or even for geographical reasons);
• ensuring the following principles: economic and social solidarity; security of supply; consumer protection; environmental protection efficient use of resources related to: allocative efficiency, technological efficiency, efficiency of distribution etc.; economic sustainability and equity; perfectibility and continuous efficientization; observing rules related to land management; quality of the provided services; applying undiscriminatory practices and support in order to protect unprivileged individuals.

The particularity of the services of general economic interest comes from the fact that they are both public, “general interest” services, and economic services. Nowadays, the access to these services is limited by economic, geographic and constructive factors, and the main goal is for them to be provided to all citizens, in a reasonable manner.

The main SGEI characteristics are:
• **Strong regulation and major intervention of authorities.** Public authorities have an essential role in organization and regulation. Even though it is acknowledged that “intervention is counterproductive” (Stiglitz.; Walsh, 2005), especially if these services are
of industrial nature, the responsible public authority has dominant powers; for reasons of social equity, the advantages of applying free competition norms are less important than ensuring access to population. Public authorities have an essential role in:

- defining economic services of general interest and mentioning their tasks;
- establishing the financing method of these services;
- authorizing and supervising the operators in the field in total transparency, taking measures of structural or just limited punitive correction, depending on the circumstances;
- establishing sanctions (by courts of jurisdiction) for the operators who failed to fulfill their obligations and caused prejudice to the consumers, as well as the nature and quantum of the compensations;
- ensuring the access to this type of services to the vulnerable unprivileged consumers, by establishing the quantum of the financial help given to them or a number of preferential tariffs;
- regulation and adjustment of prices, having as well the right to decide and negotiate on behalf of the consumers;
- ensuring that the consumers have undiscriminatory access to available networks;
- equitable distribution of services in the area of incidence and in consensus with the land management;
- sustainability of the SGEI development and efficientization, parallel to the increase of the accessibility level;

• Imperfect market and monopoly. Within territorial communities, the performance of a certain type of SGEI represents, in most of the cases, a monopoly (it is impossible to create parallel water, waste, gas or electricity networks and individuals cannot choose freely any service provider). If SGEI are provided through economic operators, these are given exclusive rights and resources. On a competitive market, a firm chooses the level of production where the marginal costs equal marginal revenue and adapts its production to the market price. The monopolist is tempted to maximize his profits through price, but he is also confronted to the decreasing curve of the demand, the price decrease being the major factor in increasing the sales volume (Stiglitz.; Walsh, 2005). The price increase for gas and heat energy lead to the massive disconnection of household utilities from the central public system while searching for other solutions, which prompted the service provider to retechnologize and to provide incomparably cheaper services, with a notable social surplus (the most profitable solution for society, at large, and for the individual, singly). This solution is in convergence with politics of reducing resource consumption and increasing efficiency. In the case of increasing water costs, consumers cannot have the same behavior. The intervention of the authorities becomes productive when it targets the problem solving through the increase of efficiency and service quality, and the decrease of dysfunctions.

As a conclusion, SGEI market is an imperfect market characterized by imperfect competition generated by the limited amount of providers and the entry barriers that increase their power of negotiation, by the fact that the price, quantity and quality levels of the provided and consumed services do not correspond to the market mechanisms. However, it must be said that, taking into account the interests and needs of consumers, they are confronted with a series of market unbalances that affects them in multiple aspects: economic, educational, health safety etc. (Petrescu; Dinu; Stefănescu; Dobrescu, 2010).
At the same time, SGEI market is characterized by imperfect information. “Information, or its absence, plays a key role in determining the shape of markets and the ability of private markets to ensure that the economy’s scarce resources are used efficiently.” (Stiglitz; Walsh, 2005). Private economic operators that operate within the limits established by the authorities are interested in maintaining profits rather than in investing in efficient retechnologizations, since they are not sure of the profit recovery in a reasonable period of time and in accordance with the negotiated contractual terms. At the same time, consumers’ sovereignty is also affected on this market, because they are not included in the negotiation processes for the conditions in which the service is provided. The capture hypothesis of regulatory agents states that regulators are drawn to those whose activity is regulated, the regulatory agents (public authorities) being tempted to support the operators whose activity they examine. The intervention of the authorities increases the risk of externalities that appear when certain costs exogenous to the provider, which affect persons (physical or legal), cannot be found in the price of the service. If the private operator, who took the responsibility of disposing waste, in order to increase his profits, does not do that systematically or does not take them to a landfill, he will generate noxae and pest holes that society will endure;

- The potentiator feature of social-economic development. As infrastructure services, SGEI have a major role in the development of all the other social-economic areas in the respective communities. On the one hand, the determinism of the financial and organizational capability of the communities on SGEI explains the level of their development and accessibility; on the other hand, the absence or precarity of these services makes it impossible to connect the communities to society and also makes their development impossible within society. We should mention the fact that there may be serious entry barriers in these areas, which trigger the intervention of authorities.

Unlike administrative public services, SGEI have an altered collective character, as for some SGEI there is the possibility of competition between economic operators, of exclusion of certain consumers, and of attracting new clients etc.

In this article, the approach of consumer protection in the field of services of general economic interest takes into consideration the interference of several distinct fields, with own concepts, and of great importance for the development of society, with reference to: the characteristics of the services of general economic interest and the conditioning of applying principles stated by the economic, technological, cultural (level of education, tradition) principles of the communities.

2. Method, statistic instruments and databases

Considering SGEI as a major component of the welfare and quality of life of any community who beneficiates from them according to legal regulations in the field, the goal of this endeavor is to emphasize the SGEI impact on the budgets of households that beneficiate from these services.

The goal of the research is to evaluate, on a small but representative sample, the actual manner in which consumer protection is ensured, in the field of heating services for
households, given that these services are significant for the family budgets during the cold season.

For the methodology of the approached research there were established theoretical statements as orientation principles, methods and techniques for gathering empirical data, organization, correlation and elaboration processes for the obtained information, theoretical construction and reconstruction processes. The used methods, techniques and processes were chosen based on the specificity of the introspected field and the subject of the research.

Within the theoretical statements, as paradigmatic references of this endeavor, there were established analysis coordinates of the consumer protection and devolved determinisms. The heating services for households are considered to be essential, general interest services, hence the authorities are obliged to ensure them at the level of supportability of population. The heating services for households are organized and coordinated by local authorities through their own operators or through private companies. The heating costs at the level of population greatly depend on the retechnologization of operators, but also on the price of the fuel (gas, coal etc.). Taking into account that each person has the right to the essential heating service of their household, the local authorities give subventions to the unprivileged population, according to their own budget constraints.

Consumer protection for household heating implies:
- unbounded financial and territorial accessibility;
- active participation of the consumer to the negotiation processes of the contractual clauses;
- correct and systematic information on all facilities, conditions, including the provision prices of these services;
- punctual and correct response to their reasonable requests and complaints concerning the respective service.

The research methodology is based on the principles of unity between theoretical and empirical (Marsh; Rossman, 1989) starting from identifying the phenomenon in the systematized construction of theory, as well as on the principles of realism, determinism and cognoscibility, on condition that the certitude of knowledge is unaccomplishable in the sense of absolute precision.

Data were gathered based on a survey of 55 households in sector 2 of Bucharest, showing the diversity of all possible situations, from several perspectives: income, space, number of persons and used equipments. The sample followed these criteria:
- there were only included households that use gas or gas heat energy for heating;
- households were chosen from different social groups, with differential structures and revenues;
- several types of buildings were included in the research (blocks of flats, uni/plurifamilial houses, mansions) with different heating systems (individual heating units, block heating units, heat energy from the central heating system, stoves).

The survey included the following aspects:
- the heating system used in the household;
- the number of rooms in the household;
- the number of persons in the household;
• the monthly revenue per household (adjusted values were accepted);
• the amount of money paid for heating that month;
• the intentions of changing the household heating systems.

Given that the goal of the survey was to emphasize the causality relationships between the universality of the access, as a condition for consumer protection, and the two essential factors: types of heating equipments and budget constraints, the survey included several types of households that covered the existing diversity in sector 2.

First of all, households included in the survey were organized according to their heating equipments, 60% of them being connected to a heat energy provider (figure no.1):

![Figure no. 1 Structure of the analyzed sample](image)

Source: data gathered and processed by the authors

The methods and techniques of data elaboration include: organization, systematization and correlation of information in order to obtain pertinent conclusions. The principle of unity between quantity and quality triggers the convergent use of statistic and casuistic methods, and the use of several methods that are both quantitative and qualitative. In order to illustrate the impact of the gas or heat energy supply service on the standard of living, different calculation techniques were used for the statistic indicators (average values, concentration indexes etc.). The Lorenz curve and the budget constraint curve are used in order to detect the way in which revenues are distributed and the capacity of the population to cover the expenses for household heating.

3. Analysis of the data resulted from the survey

The data resulted from the survey were structured in table 1 by the type of household and the heating unit, elements that have a determinant role in the heating cost. The households in this survey use methane gas or another heat agent based on methane gas.

Taking into consideration the universality of the access to the essential heating services, as primary condition of the consumer rights, the analysis is important both at the level of delivery costs, according to the system capabilities, and for the availability of resources necessary to the purchase.
The maximum level of heating expenses per household is found at the old block of flats, with tall rooms, thermally non-insulated, with old wood frame and old block heating unit (146-200 lei/room). Smaller heating expenses per room were found at the new mansion household and the 3 room apartments (also due to the subventions that some of them receive). A special case were the households from the old houses, where there are no heating units or heating is rudimentary, and it is done while preparing meals. In these conditions expenses are very small, and subventions are also used for covering other necessities.

Table no. 1 Results of the survey

<table>
<thead>
<tr>
<th>Construction</th>
<th>Heating system</th>
<th>NH</th>
<th>NP</th>
<th>TP</th>
<th>NR</th>
<th>Rh</th>
<th>TRh</th>
<th>HCh</th>
<th>Subvention</th>
<th>HChcor</th>
<th>THCh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 heat energy</td>
<td>3 1 3 2</td>
<td>600</td>
<td>1,800</td>
<td>275</td>
<td>0.1</td>
<td>250</td>
<td>750</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 2 block heating unit</td>
<td>10 2 20 1</td>
<td>800</td>
<td>8,000</td>
<td>140</td>
<td>0.4</td>
<td>100</td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 4 12 3</td>
<td>1,600</td>
<td>4,800</td>
<td>350</td>
<td>0.4</td>
<td>250</td>
<td>750</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 3 18 3</td>
<td>1,500</td>
<td>9,000</td>
<td>384</td>
<td>0.2</td>
<td>320</td>
<td>1,920</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>4 3 12 2</td>
<td>1,500</td>
<td>6,000</td>
<td>298</td>
<td>0.2</td>
<td>248</td>
<td>992</td>
<td></td>
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<tr>
<td>subtotal</td>
<td>33 86 72</td>
<td>1,152</td>
<td>38,000</td>
<td>279</td>
<td>0.4</td>
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</tr>
<tr>
<td>Group 3 new mansion</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3ap individual heating units</td>
<td>1 5 5 6</td>
<td>50,200</td>
<td>50,200</td>
<td>480</td>
<td>480</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>subtotal</td>
<td>7 16 29</td>
<td>3,900</td>
<td>27,300</td>
<td>788</td>
<td>788</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Group 4 wattle and daub houses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gas cooker</td>
<td>5 3 15 1</td>
<td>500</td>
<td>2,500</td>
<td>45</td>
<td>162</td>
<td>-117</td>
<td>-585</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gas stoves</td>
<td>5 3 15 2</td>
<td>500</td>
<td>2,500</td>
<td>62</td>
<td>162</td>
<td>-100</td>
<td>-500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glazed tile stoves</td>
<td>2 1 2 3</td>
<td>600</td>
<td>1,200</td>
<td>122</td>
<td>16</td>
<td>106</td>
<td>212</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subtotal</td>
<td>12 32 21</td>
<td>517</td>
<td>6,200</td>
<td>65</td>
<td>-73</td>
<td>-873</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55 145 138</td>
<td>3,065</td>
<td>168,600</td>
<td>306</td>
<td>239</td>
<td>13,124</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: data gathered and processed by the authors

where:
NH – number of households; Rh – revenue per household;
HChcor – heating cost reduced by the State aid; NP – number of people in the household;
TRh – total revenue of the households; TP – total of people;
HCh – heating cost per household; THCh – total heating cost;
NR – number of rooms.

Heating costs are of great importance for family budgets and they may fundamentally influence the way in which families are able to cover the rest of their necessities (figure no.2).
Declarativity and Efficiency in Providing Services of General Economic Interest.

Empirical Study Regarding the Relation Between Heating Costs and Budget Constraints

Figure no. 2 Ratio between heating costs and remaining expenses
Source: data gathered and processed by the authors

The relative amplitude of the expenses variation per room is of 84 lei if the fourth group is excluded (in which most of the families do not own adequate heating units and have precarious financial situations, even though they are important for the sample) and of 169 lei, if this group is included. The amplitude is calculated at the level of the average heating cost for a room, thus showing the significant way in which the households from the second group are affected. By comparing the heating expenses covered by the sample households to the ones from other towns (table no.2), it appears that they are positioned in the middle of the variation interval.

The expenses of these persons will be severely auto diminished, under their limit of safety.
### Table no. 3 Households by average revenue per person

<table>
<thead>
<tr>
<th>NH</th>
<th>NP</th>
<th>NPa</th>
<th>RTh</th>
<th>RP</th>
<th>RHa</th>
<th>NH</th>
<th>NP</th>
<th>Rpm</th>
<th>RHm</th>
<th>RHa</th>
</tr>
</thead>
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<td>5</td>
<td>15</td>
<td>2,500</td>
<td>167</td>
<td>500</td>
<td>5</td>
<td>15</td>
<td>200</td>
<td>3,000</td>
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<td>5</td>
<td>15</td>
<td>2,500</td>
<td>167</td>
<td>500</td>
<td>5</td>
<td>15</td>
<td>206</td>
<td>3,085</td>
<td>617</td>
<td></td>
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<tr>
<td>20</td>
<td>53</td>
<td>3</td>
<td>21,200</td>
<td>400</td>
<td>1,060</td>
<td>7</td>
<td>21</td>
<td>317</td>
<td>6,650</td>
<td>950</td>
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<tr>
<td>10</td>
<td>30</td>
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<td>3</td>
<td>12</td>
<td>338</td>
<td>4,050</td>
<td>1,350</td>
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<td>5</td>
<td>3</td>
<td>3,000</td>
<td>600</td>
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<td>20</td>
<td>350</td>
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<td>700</td>
</tr>
<tr>
<td>1</td>
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<td>767</td>
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<td>1</td>
<td>5,200</td>
<td>2,600</td>
<td>5,200</td>
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<td>3</td>
<td>447</td>
<td>1,340</td>
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<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>6,900</td>
<td>3,450</td>
<td>6,900</td>
<td>2</td>
<td>2</td>
<td>494</td>
<td>988</td>
<td>494</td>
</tr>
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<td>1</td>
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<td>2</td>
<td>4,200</td>
<td>4,200</td>
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</table>

Source: the authors

where:
- NPa – average number of persons in the household;
- RHa – average revenue per household;
- RHm – household revenue minus the heating costs;
- RP – revenue per person; Rpm – revenue per person minus the heating costs.

In order to become aware of the permissibility of the access to the household heating service, households were organized in quintiles in ascending order, by revenues (table 4); the Lorenz curve (figure no. 3) emphasizes the added frequencies of the households (as a number), parallel to the added frequencies of their revenues. The distribution by quintiles, as well as the curve, were done taking into account the initial revenues of the households, and the remaining revenues after covering the household heating costs.
Declarativity and Efficiency in Providing Services of General Economic Interest.  
Empirical Study Regarding the Relation Between Heating Costs and Budget Constraints

Table no. 4 Distribution by quintiles

<table>
<thead>
<tr>
<th>By initial revenues</th>
<th>Revenues minus the heating costs</th>
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<tr>
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<td>Second Quintile</td>
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<tr>
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<td>RHa</td>
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<td>500</td>
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<tr>
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<td>600</td>
</tr>
<tr>
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<tr>
<td>11</td>
<td>496</td>
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<tr>
<td>20</td>
<td>3.51</td>
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<tr>
<td>20</td>
<td>3.51</td>
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</tbody>
</table>

Source: the authors

The strong deepening of the curve – in relation to the first diagonal of the axes (figure no.3), which shows the perfect equity of revenue distribution – emphasizes a substantial concentration of the revenues in the last quintile (almost 75%) and thus, a certain degree of polarization of the population (for which the households of the second group are of great importance) that increases even more, reaching 77% when taking into account the heating expenses. The Gini coefficient, which is 0.3955 for the initial revenues and 0.3887 after the
deduction of the heating costs, confirms the fact that some of the households are pushed to the inferior quintiles because of these expenses (figure no. 3).

As a conclusion, households from the first quintile that have average revenues, per total of persons, smaller than the minimum wage per economy and the social reference indicator, do not have access to the essential household heating service, and the subvention does not solve their problem (even though for some of them it surpasses the quantum intended for heating).

The heating costs have a most drastic effect on the households from the second quintile, where the average revenue per household decreases by approximately 26%. Together with the decreases of 19% (third quintile) and 12% (fourth quintile), this leads to the strong decline of the values on the ordinate. The big difference of height between the fifth quintile and the rest of the quintiles illustrates the differentiation degree of the revenues and the low level of the heating costs due to much better facility and constructive conditions. The analysis was completed by emphasizing the way in which budget constraint influences the access to the heating service. In figure no. 4 the expenses per person for household heating are found on the abscissa, and the revenue per person as budget constraint is found on the ordinate. Constraint is practically ignored at the level of the lowest proportion between expense and revenue per person (this is the case of group 3). An abnormal situation can be
found in the households without any heating system, where the subvention increases the revenue per person at 200 lei, while the expenses remain at 4 lei, which can also be ignored. The sample average is significantly optimized by the extremely reduced consumption of the households from the third group, which practically have no heating (gas cylinders), and it is higher than the budget constraint triggered by the reference social indicator. The highest budget constraint is that of the household with one retired person living in an overdimensioned apartment, whose heating expenses drastically reduce their possibility to cover the rest of their necessities (including medication).

In figure no. 4 there were represented only the budget constraints at the level of average values per sample for households in group 1 (the most numerous one) and for the household with the largest consumption per person, considered representative at the sector level.

In order to continue the analysis of the capacity of access to heating services, we also introduced other useful national indicators, such as the social reference indicator set at 750 lei per month, considering that this is the level at which a person can cover their bare necessities. If the heating expenses are deducted from the value of this indicator, the result would be the remaining revenue of that person available for other expenses. Setting the social reference indicator at 750 lei, as a guiding mark for a decent living and admitting –
based on the average heating cost by household type situated at the average level recorded in different locations of the country – an average expense per person for this essential service of 91 lei, established after the granting of subventions, we could state that population faces significant budget constraints during winter (figure no.4) determined by revenues, number of persons in the household, occupancy rate (persons/room), constructive solutions and facilities. If the sample average presents a much better situation than the one at the level of the social reference indicator, the budget constraint is strong at the level of the first group, and expenses are less possible for the rest of the necessities than in the case of the person with the highest consumption. Therefore, many persons want to disconnect from the central system without any hope of buying an individual heating unit, because of its very elevated price. By introducing heat cost allocators, each family has the possibility to adjust their consumption. The reduction of heat energy consumption per apartment represents the effect of substitution. At the same time, these households are forced to reduce all their expenses during winter, which represents the revenue effect. “The slope of the indifference curve (the marginal rate of substitution = how much of one good an individual is willing to give up in return for one more unit of another) measures the level to which individuals give up the remaining expenses in favor of heating. The slope of the budget constraint is the relative price (the revenue effect). Consumers choose the point where the marginal rate of substitution equals the relative price” (Stiglitz; Walsh, 2005). The best point on the indifference curve is at the level of the sample average, without power of generalization. The worst point on the indifference curve is at the level of the first group, which practically cannot choose between reducing heating or giving up other bare necessity goods.

Conclusions

While providing SGEI, there may be substantial discrepancies between the aspirational, declarative requests and the effective achievements, because of the small revenues of the population, the deficient funds destined to benefits, and the insufficient investments in retechnologization. Within this study, the consumer protection in the field of household heating services, as essential services for the individual safety, was defined in terms of limitless financial accessibility, and from a network and equipment point of view. According to the survey, 10% of the sample households are not connected to the central system, 59% of the households have less than 400 lei per person for covering the rest of necessities (food, clothes, electricity etc.) and 12% of the households have inadequate heating units. The results show a low level of actual accessibility meant to satisfy vital necessities and the possibility that other households close to the poverty level give up these necessities. The household budget constraints and heating costs (gas price is aligned to competitive market) are very important for the access to the service. Nevertheless, it is mentioned that due to protection measures, approximately 33 families (60% of the total number) get heating benefits, while 10 families increase their standard of living, their heating costs being smaller than the benefits received. Consumer protection would have a more significant role in the relationship between budget constraints – heating costs if authorities were more involved in the partial financing for those at or below the poverty threshold and in supplying facilities for the retechnologization of the providers (the example of Oradea – table 2).
At the same time, other than ensuring the access to essential services, consumer protection also includes their systematic supply, material support for those facing precarious financing situations, observing the assumed quality conditions, and detailed, accurate and systematic information on the field. From this point of view, the survey and the analysis of the contracts concluded between consumers and service providers highlighted the fact that the accurate and systematic information on all facilities, conditions, including supply costs of these services and gas quality (compared to that specified in the standards), provenance of resources (internal production and import), costs, substitution possibilities, price change, supply failure and motivations etc. is always at the discretion of the regulatory agents. As for the citizens’ participation in the negotiation of the contractual conditions for the provision of services, there was never such case, given that the consumers receive a contract that stipulates that they are integrant part of the conditions approved by Order of the ANRDE president.

The final conclusion of this limited research revealed the fact that the service of general interest of household heating is not provided at the level of consumer expectancy, and neither at the level of community desiderata and European regulations.

References


The Protection of Consumer Rights in the Field of Economic Services of General Interest


