



FLORENCE SCHOOL OF REGULATION

AFFORDABILITY OF BASIC PUBLIC UTILITIES: REGULATION AND POVERTY POLICIES

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Report on Workshop Proceedings

Florence School of Regulation

Workshop

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The FSR Workshop on “Affordability of basic public utilities” organized by the Florence School of Regulation gathered 36 participants from 12 countries. The Workshop was devoted to present the current knowledge on issues in affordability of public utilities, to facilitate a discussion between academics and interested parties from the public, private and voluntary sectors, and to explore the potential for a research program. Participants to the workshop were mostly experts from Academic Institutions, National Regulatory Authorities, and Energy Companies.

The Measurement of Affordability in Basic Public Utilities: Present Knowledge and Open Issues

In times of liberalization and energy price increases, the affordability of basic public utilities raises a series of new questions, both from a practical and from a theoretical point of view.

From a practical point of view, liberalization and price increases questions the role of regulators in affordability policies. Do regulators have a social responsibility or should they just take care of the functioning of the markets? In the recent history of European regulators, two different ways to approach the question can be observed. On the one hand, a first approach considers regulators as mainly technical bodies that should only take care of the working of markets. In that case, issues related to social and environmental responsibility are considered as purely political problems that should be solved at political level. On the other hand, a second approach considers responsibilities from regulation and policymaking so deeply intertwined that it is not possible to separate them.

Whatever the approach adopted, the interplay of liberalization and social policies bears a risk of political and/or institutional conflict. This is the case not only in European countries, but also in developing countries, where affordability concerns could lead to policy reversals, challenging the reforms based on privatization and liberalization.

From a theoretical point of view, one important question is the measurement of affordability because a proper measurement is necessary both for estimating the extent of affordability problems and for evaluating their causes. Several definitions of affordability exist, as well as many methodologies for measuring affordability problems. But are some definitions more useful than others? And are the indicators usually adopted valid generally in time and in space or in which measure are they specific to a certain context?

As a first approximation, affordability can be defined as “the ability to pay for a necessary level of consumption within normal spending patterns”. However, this definition is not precise enough, the “necessary level of consumption” and the “normal spending patterns” being dependent on many factors, for example the size of households, their income and the energy efficiency of the buildings in which they live. Different measures exist to estimate affordability more precisely. The first one, largely adopted, is based on the ratio of actual bill for utilities services to households’ incomes. However, this measure suffers from several shortcomings. For example, it does not reflect consumers’ ability to pay, and it bears no reference to socially desirable minimum standards of consumption. A second measure, replaces actual bills with “reference bills” to estimate the affordability problem. This measure has a normative character, as it relies on a “political” definition of what the standard of consumption should be and presents also has some shortcomings: in particular, ignoring the actual consumption, it does not include those households with an

overconsumption in public utilities. Finally, a third, “behavioral” measure considers that the consumption of public utilities is not affordable if it “excessively crowds out other expenditures”. This definition includes in the group of consumers with affordability problems not only those who cannot afford the minimum quantities of public utilities, but also those who over-consume utilities and therefore have to reduce their consumption of other goods.

The application of these different measures leads to very different estimations of the proportion of households with affordability problems.

Another question is whether affordability problems have to be estimated by “objective” or by “subjective” measures. For example, in the UK, the official definition of fuel poverty considers as “fuel poor” those households who spend, or need to spend, more than 10 % of their income on energy. The measurement of fuel poverty according to this definition is essentially driven by incomes and by energy prices. An alternative method for evaluating fuel poverty is given by subjective declarations of households considering that they cannot afford enough fuel for all their heating and cooking needs. Again, the measurement of the number of households suffering from fuel poverty as revealed by these two definitions does not produce the same result and the matching between both measurements is imperfect. In particular, the fuel poor populations identified by an “objective” measure are characterized on average by lower incomes, while the “subjective” measure is driven by self-rationing of energy consumption. The method chosen for measuring fuel poverty thus can have relevant implications in implementing public policies: while policies aiming at reducing the consumption can have an effect on the “objective” fuel poverty, the probability that “subjective” fuel poverty is affected is lower, as many of the “feel fuel poor” people could feel worse off.

Policies Towards Affordability in Basic Public Utilities: The Views and Experiences of Regulators, Consumers and the Industry

In Europe, different methods are used to tackle the problem of energy affordability. In the UK – for instance – has been set the policy objective of eradication of fuel poverty by 2016, and the implementation of measures to reach this objective is left to voluntary actions of the operators. In other countries, policy measures towards

affordability have a mandatory character: in this perspective, France has pursued such a policy for the dominant operator, and Italy seems on way to adopt a similar one for all the suppliers in energy markets. Finally, there is a third group of countries that have neither defined which populations are concerned by utility affordability problems nor implemented any policy in that field.

In the **United Kingdom**, energy affordability policies are implemented under the supervision of Ofgem, the energy regulator. Ofgem's possibilities of action in the field of energy affordability policies are limited by its main duty, which is to protect consumers by promoting competition. However, Ofgem has an important secondary duty of protection of "vulnerable" consumers, i.e. consumers who are disabled or chronically sick, of pensionable age, with low incomes or living in rural areas. Rural consumers have lower access to natural gas network and are therefore more vulnerable to fuel poverty. Ofgem also has to contribute to the Government's strategy of eradicating fuel poverty. Ofgem's Social Action Strategy has four main themes. First, some regulatory obligations are placed on suppliers' licenses, of which some deal with social obligations. In particular, note that suppliers: a) are not allowed to disconnect vulnerable customers in winter; b) have obligations regarding debt prevention and management. More recently, Ofgem also has put in a program to provide incentives to extending gas networks into fuel poor communities. Secondly, Ofgem encourages suppliers to offer social programs, which are voluntary arrangements. These social programs can include social tariffs or special discounts. The role of the regulator is mainly to control these offers, compare them, provide incentive for transparency and highlight what are the best practices in that domain. Thirdly, Ofgem plays a role in informing consumers about ways to lower their energy bills, for example by switching energy supplier. Finally, Ofgem influences the debate about measures to help tackle fuel poverty. However, its role in that field is rather limited. One action is on how fuel poverty can actually be identified and targeted. This is becoming increasingly difficult, as more and more people fall into the official definition of fuel poverty. This could raise questions about data sharing between on the one hand the government who has a large set of information about the people, and on the other hand the suppliers in energy markets.

In **Italy**, the law defining the objectives of the energy regulator assigns him some tasks of consumer protection. Four aspects related to affordability problems are usually dealt with by the regulator. These aspects are (1) access to the service, (2) price, (3) informed choice, and (4) efficient use of energy. The Italian solution concerning price

problems for low-income families has consisted in creating a social tariff mid-2007, after ten years of negotiations. A supplier of last resort was introduced both for domestic customers and small companies. Measures of protection of vulnerable customers have been introduced, and a definition of vulnerable customers given in the national law. This definition is related to health and economic conditions, i.e. an indicator of poverty that takes into account economic factors and household composition. The system that has been adopted is compatible with fully competitive energy markets, and it is financed by all electricity customers in Italy. It consists in a social tariff which gives households a fixed discount on their bill, this discount being defined depending on the number of members of the household. The total cost of this system could amount to 400 million € at the maximum. The system is based on an indicator of poverty (not fuel poverty), which is also used for other services. The social tariff has been designed to guarantee an average saving of 20 % in electricity bills for vulnerable customers. However, if their consumption is below average, the saving can be much higher than 20 %. A similar system will be implemented also for gas. In addition to this social tariff, other protection measures apply to vulnerable customers. For example, they cannot be disconnected under 30 € of non-paid bills and disconnections are not allowed for customers using electric appliances for health reasons. Finally, in case of non-payment, Enel – the dominant supplier of electricity in Italy - has introduced a measure of reduction of contractual power prior to disconnection.

In **France**, there is a long tradition of cooperation between EDF and the government in order to deal with affordability issues. Most measures towards vulnerable have first been defined in a contractual manner between EDF and the government, and then became law. Since 1996, EDF has been financing local social funds for energy, which are giving financial assistance to households with payment difficulties. In addition, vulnerable households benefit from a minimum service of energy supply (reduction of contractual power in case of non-payment) and from discounts on technical operations. In 2005, a social tariff has been created by the government for electricity, followed, in August 2008, by a social tariff for gas. These measures are financed by a “public services compensation tax” which is paid by all energy consumers. The role of the regulator is to estimate the involvement of different suppliers in these measures. The definition of vulnerable customers in these tariffs is based on households’ incomes. While there are still concerns about the proportion of households who do not use the mechanisms aimed at improving energy affordability, the policies that have been implemented both by the state and by the

main supplier EDF have produced positive results. More than 650.000 customers are currently benefitting from the social tariff for electricity and 300.000 households are benefitting from local financial support for their energy bills. In addition, more than 500.000 customers are protected from disconnection during the winter and the overall number of disconnections has decreased from 300.000 in 2000 to less than 100.000 in 2008.

In ***Scandinavian countries***, affordability issues have generally not been addressed by energy regulators and by the industry. Utilities are not considered as having social obligations towards vulnerable customers. Hence consumers with utility affordability problems do not benefit from specific measures. Instead, the social system takes care of the general difficulties of these households. On the retail markets, there seem to be no effect of increased customer switching on the prices to final consumers. Energy prices have increased in Scandinavian countries like in other European countries. Therefore, energy affordability becomes increasingly an issue. The possible solutions are ranging from more efficient competition to windfall taxes for utilities and energy efficiency and demand response.

In ***Eastern Europe***, it is difficult to draw a general picture of energy affordability problems, as there are huge differences between these countries regarding the general levels of poverty in the population. However, the post-communist transition has led to fast changes in the way tariffs have been set. Especially, the application of "true" costs to the previously heavily subsidized companies has dramatically increased consumers' energy bills, increasing the problem of energy poverty and the vulnerability of populations. Some common characteristics of Eastern European countries can be identified, like the predominance of collective apartment buildings, the heavy reliance on district heating and, especially in rural areas, and an important use of fuelwood. Montenegro is an illustration of the difficulties faced by households during the transition. In Montenegro there has been a long tradition of low energy tariffs. In 2004, the first significant electricity price increase was announced. The households which have been particularly vulnerable to these increases were poor households with disabled persons and those who received family material support and also households headed by an unemployed or a retired person. A model estimating the switching of heating mode resulted in an estimation of 25 % of consumers (in addition to the current 50 %) switching to fuelwood because of increasing energy prices. To cope with these price increases, the government has defined a social program. Their forecast was to allocate 10 million € for households

who would not afford the energy bills, with an expected 100.000 households applying for the subsidies. After three months, 46.000 consumers have applied for subsidies and the government has spent 260.000 € for these subsidies.

Finally, *at the EU level*, there is recognition that markets are not sufficient to provide a satisfactory protection of energy consumers. The Third Package contains new measures intentionally targeted at vulnerable consumers. Protection of these customers comes through article 3 of electricity and gas directives. These are obligations rather than voluntary measures. While the Commission is leaving the definition of vulnerable consumers to Member States, all measures that are used to protect consumers are to be notified to the Commission on an annual basis. The flexibility for application at Member State level is subject to certain conditions. The service being provided must be in the general economic interest and the obligations have to be clearly defined, so that stakeholders are able to understand what is going on on each market. The measures should support the poorest households and should be targeted so that their behavior changes to adjust to the new market conditions (no distortion of the energy prices, rather focus on other measures like direct support, income transfers, energy efficiency, but no discretionary fiscal measures). In the EU perspective, one of the tasks of the national regulators will be to ensure that consumer protection is effective. To summarize, consumer protection is available under legislation – both existing and proposed.

In face of these diverse adopted measures towards energy affordability, *Consumer Associations* highlight several shortcomings of current policies. A first concern is on the efficiency of current affordability policies in times of rising energy prices. The price increases of the last years have led to a sharp increase of the number of fuel poor households. And the benefits for vulnerable consumers arising from energy affordability policies are offset by the price increases because benefit payments are often not linked to the prices of utilities. A second point is that energy affordability policies should not only be focused on short term issues, but also address the long term issue of improvement of energy efficiency of the housing stock. Thirdly, they express concerns about the ability of most fuel poor consumers to adapt their behavior either to benefit from retail competition or in a way that would allow them to realize important gains from energy efficiency measures. As these households are facing difficulties in many dimensions of their lives, their capacity to make use of the diverse options available to reduce their exposure to fuel

poverty is also relatively limited. Finally, in the case of the UK, associations express concerns about the fact that many actions are left to voluntary initiatives of suppliers. In particular, they consider that the provision of social tariffs should be regulated in the aim to provide consistently the lowest social tariffs.

A Research Agenda: Regulation and Poverty Policies

The Workshop has confirmed the usefulness of further research on affordability of basic public utilities. The research topics that have been identified by the participants can be grouped in four themes. Firstly, further research is needed to get a better understanding of the diversity of national practices in dealing with affordability problems in the field of public utilities. European comparisons of existing mechanisms are necessary, as huge differences exist both between the definitions of affordability and the design of the mechanisms to alleviate poverty. For example, there are differences concerning eligibility criteria, levels of discount, and the funding of mechanisms. A systematic comparison of existing mechanisms would allow to identify what works and what doesn't, and to highlight what are the best practices.

Secondly, the knowledge on the efficiency of different mechanisms needs to be improved. For example, it is not clear whether subsidy mechanisms are the most efficient way of dealing with affordability problems. The analysis of the efficiency of the different mechanisms should not be restricted to subsidy schemes, but it should also take into account those mechanisms aiming at improving housing conditions, i.e. energy efficiency measures. A further examination of all these mechanisms would also be useful to evaluate if and to what extent the definition and implementation of measures should be left to the companies (i.e. on voluntary basis).

Thirdly, some research is necessary to explore the links between affordability policies and competition. To what extent are market opening and protection of vulnerable consumers compatible? How is competition affected by affordability policies? And what are the incentives for suppliers to cream-skim in the presence of subsidies, to attract only the most profitable customers? Finally, how does customer switching affect vulnerable customers?

Finally, a fourth research topic is the behavior of vulnerable consumers. Do these consumers have some specificities regarding their consumption, their investment in energy efficiency measures, the use of smart meters or pricing comparisons, etc.? How do vulnerable consumers react to measures aiming at improving affordability of public utilities? And are there differences among countries regarding the behavior of consumers?

In conclusion, the Workshop showed the need for a better understanding of affordability issues in the field of basic public utilities. This aim is particularly relevant in energy markets as Europe is entering a new era characterized by the implementation of measures to reduce energy scarcity and climate change: these measures would indeed increase energy prices and - accordingly - the affordability issue.