# REGULATORY QUESTIONS OF THE ENERGY MARKET IN HUNGARY

József BÉCSI

Department of Business and Economic Policy Budapest University of Technology and Economics H-1521 Budapest, Hungary Phone: +36 1 327 24 83 e-mail: jozsef.becsi@pm.gov.hu

Received: Sept. 8, 2004

### **Abstract**

The year 2003 involved a considerable change in Hungarian energy market. Liberalization of the formerly fully regulated electricity market began, and some practical experiences already presented themselves, as well as the new act on partial market-opening of the gas-segment came into being. The lifting of the monopole situation raised some theoretical and practical questions, on which the answer was given on the one hand by the rethought regulation, on the other hand by actors entering the market. In both areas there are interesting conclusions to be drawn from the foregoing events and from the experienced phenomena as well.

In this study we endeavour to provide a resume about the theoretical background concerning the governmental regulation of the situations mentioned above.

*Keywords:* deregulation, liberalization, energy market, government failures, grid-base services, natural monopoly, regulation, regulatory authority.

## 1. Theoretical Background

The economic theory is widely engaged in the question of effectiveness, distribution and wealth-increase as functions of the market. These analyses correspond with each other in the respect that they apply a wide range of stipulations to specify the notion of the market. A real market which fulfils these functions will have to be in possession of many attributes [21]. An appropriate number of sellers and buyers have to be present who are informed perfectly (or at least considerably and symmetrically), the cost and benefits must be defined, and the commodities have to be homogeneous<sup>1</sup>. These conditions rarely rule altogether. Nevertheless, if lack of the different conditions results in the imperfect operation of the market, we need to put additional analytical tools into action in order to understand them, which means inspecting the market failures.

Nowadays, only a few people believe in the omnipotence of the market. In the modern market economies the significant part of the goods and services are not distributed via pure market competition. This does not mean that the state distribution

<sup>&</sup>lt;sup>1</sup>Further stipulation can be taken on the available technologies or obstacles to enter the market

224 J. BÉCSI

systems substituting or completing the market would be free from failures. On the contrary, their functioning is attached to many mistakes and defects [15]. In many cases, their operation and maintenance produce better outcome than the classical market which can be defeated or still-born in a particular area. The question is how we can make such a reasonable compromise on social level which ensures the market or economic effectiveness as well as the optimal quantity of the production parallel with reasonable prices, and this way provides relative satisfaction for social partners at the same time.

It is generally thought that the competitive factors lead to high degree of efficiency [10] and that competition is one of the most dominant motives of innovation. In the course of the past two hundred years also the economists recognized that there were certain circumstances under which the market did not work perfectly. In the literature of the recent years therefore, market failures are cited as an argument for governmental intervention [25].

The activity of the state aiming at restricting individual freedom calls for special justification since market is an automatism. If we leave something in the scope of the market automatism, nothing is left to be done, there will be a mechanism which will manage the production, distribution and financing of the goods. But if a problem is taken out from the scope of the decentralized automatisms, then these quite sophisticated tasks one by one must be performed by someone presumably.

Regarding the nature[4] of the government's role, it is an important question, whether the intervention could be justified by arguments on effectiveness and fairness or simply by an a priori statement on characteristics of goods.

The traditional argumentation of the economics of welfare considers the correction of the market failures and the endeavour to make the distribution more equitable, a mission where we have to recline upon the instrumentality of the state. The role of the state can be justified by the fact that the market cannot solve certain matters. The market — a spontaneous, decentralized co-operation of the citizens, resulted in a mechanism which supplies the necessities, — is the basic instance where state plays role only if the earlier mentioned is defeated.

According to the invisible hand hypothesis the market allocation is effective automatically just when every standard condition is fulfilled [16]. In this case the intervention is not justifiable by arguments in terms of efficiency. But if one or more conditions are not granted then the realized equilibrium is not effective, so in this case some kinds of government action could be appropriate.

What can justify the efficacy of the government participation? The school of market failures proceeds from the fact that the normal, effective work of the market has preconditions. Since these may be quite strict in certain cases, it can easily happen that these conditions are not completely realized in certain market segments [11], and so the market mechanism fails or it results in an ineffective supply or abnormal demand.

The extent and depth in which the state takes its role need to be considered thoroughly. Taking the attitude of the state to the market regulation into account

<sup>&</sup>lt;sup>2</sup>Others have different opinion [19]

the possible approach [26] is defining the regulation interfering with the market processes by orders and also the regulation which concerns setting up the frames of the market processes as basic types. The former one prescribes for the actors how to behave, therefore it violates the essential welfare-optimizing function of the competition, while the latter just controls the framework for the game and thus it can go on freely. In addition to these basic categories there are many transitional forms. It is an often applied method that the government prescribes rules for the price formation or for the accounting of the costs, but beyond these the actors are free to set the prices. Examples can be found in the area of communication and informatics like regulations for the reference bid or offer and also for connection fees and terms, especially in the case of the dominant market participants<sup>3</sup>.

On the basis of the examination of the theoretical foundation of Hungarian regulation [30] it can be said that a regulation relating to the prices can be admitted if the given company is in a dominant position on a definite market and the instructions of the competition act are not sufficient to prevent from taking unfair advantage of the market power.

The efficiency of the competition is based on several primary conditions. The lack of these conditions indicates a serious risk on the function of effectiveness of the market. However, it can be improved [24].

It means a special situation indeed, if the customer, cost-holder and the consumer are not the same person. The most conspicuous precedent is the area of the subsidized medicines. A doctor writes out the prescription, the patient makes the profit out of it and the cost-holder is mainly a sort of common fund. In accordance with these, one of the basic premises of the rational decision-making (comparing costs and benefits) gets damaged. The facts demonstrate it. The over-utilization of the health- and social security systems of the developed countries can be traced back to the anomaly emerging in this decision-making situation.

In accordance with the experiences of the regulation and subsidization of the pharmaceuticals over the last decade the GVH recommends [12] to bring a new law independent of Price Act for controlling the medicine market, to get out the medicine market from the scope of the general regulation, and to manage it by considering the special attributes.

The regulation can generate improving efficiency if there is no available information on price and quality in the case of certain services [23]. Local natural monopolies, externalities and common goods may cause that supply or demand is not efficient.

The existence of monopolies reduces the efficiency of the market coordination on a given area, what results in higher prices or lower output [8], generally, compared to the optimum of competitive market. This means losses for the society [21]. On the other hand, the scale efficiency can reach such extent, that the monopoly ensures the lowest unit cost or because of the characteristics of the products or the services the production of the given good is able to be realized efficiently in the frame of a monopoly.

<sup>&</sup>lt;sup>3</sup>In Hungary this task is performed by the National Communications Authority

226 J. BÉCSI

The grid-base services were a good example of this for quite a long time. The regulation was managed by classic monopoly control rules in certain cases [6], but in other cases the state performed the activity itself. During the last years a change occurred in relation to the view of the control and even to the market structure. The reform was addressed chiefly to deregulate, namely to abandon regulation what causes exaggerated and unnecessary cost and losses as well as to create the chance for the competition on areas where it is possible<sup>4</sup>. On the other hand, the change of approaches and the increasing efficiency are needed where the control is expedient to be maintained.

These goals are present in Hungary as well. Over the last years laws sprung up [1] [2] opening the formerly strictly or fully controlled markets in quick succession, which did not leave the regulatory system invariable. The new acts have already been made on the field of electricity and natural gas, but the reform did not appeared on other areas. In the near future the regulation of the railway and road passenger transport needs to be liberalized. A new act on telecommunication is being made. As we will see, the uninterrupted operation of the models is insured as the sphere of powers and competences of the new regulatory authorities are only in the phase of forming ideas.

The primary mission of all elements of the regulating system, formed to control monopolies, is dedicated to protect the consumers. The authorities are actors of essential importance for consumer protection, but the interests of the companies under regulation have also to be respected. The companies must not suffer unjustified disadvantages or losses; the control is not allowed to jeopardize their viability, the interest of investors and share-holders must not get injured [18].

The authorities must balance between contrary and conflicting interests. The system – in order to correct the mistakes – is completed with superior level to appeal. The balance between the actors of the regulated markets, including the authority, should be created here [28]. Decisions of authorities – especially concerning prices and tariffs – can be questioned by the persons involved in the affair. The consumers could have a grievance because of the too high prices, so could the companies for the too low prices. The authority is allowed to initiate proceedings if the company does not follow the order.

The regulatory authorities have special role in forming the legal framework for Hungarian economy [13]. The legislative body forms the general rules by bringing laws, the courts interpret and apply the will of the parliament, while the authority is in direct relationship with actors involved under regulation, it controls them within the normal market processes.

This control, however, does not mean absolute control [29] over the companies' competence, in particular it does not mean taking over the management functions. The management of the company goes on a regulated market as it goes

<sup>&</sup>lt;sup>4</sup>On the one hand these costs are explicit costs emerged from administrative obligations required by the authority, on the other hand these may be opportunity costs arisen from the lower efficiency compared to the market. Remember the dead weight losses on social level caused by classical monopolies, thus this latter is not necessary to be present if the regulation is appropriate.

on markets in general; it remains in the sphere of competence of the owners and managers. The authority examines the decisions made and initiated by the management subsequently. In case of cancelled or inappropriate decisions the authority should initiate a procedure for correction as well.

It is very important to determine what kinds of rights and powers disposes the authority<sup>5</sup>, and what extend of its competence reaches to supervise. It is fundamental that this competence covers the output-side only, so it comprehends the activities and behaviours relating to the services. Its most important elements are price, quality, obligation to supply or to enter into a contract and also some other linked sub-areas.

The sphere of competence of the authority is determined by laws. These laws can also prescribe the conditions on which these proceedings should be executed under certain circumstances. Laws may provide the course of examination, preparation and execution of the supervision, as well as the frames and methods of the decision-making. It is also true, that these prescriptions and instructions are rough and general, so they mean a framework only, and the authorities have access to form their own detailed systems, to specify their own constitutional and operational rules which are approved by a supervisory body in general.

The formed course of actions, based on rules laid in laws, beyond the articulate control of executing the activity, includes the methods and forms of the connection to the companies and consumers as well as to the superior, and it also includes the obligation to report.

## 2. Practical Issues

The Hungarian practice is different from this scheme. The authority is not allowed to make itemized decision on the prices. The restraint of the free entering into a contract must be a decree based on law or must be an act. The decree can only be governmental, ministerial or municipal. So in Hungary the authorities just take the preliminary steps in decisions on prices and control their execution. Based on special acts on certain branches the governmental or ministerial decree can detail the rules and principles to form and change the administered maximum prices. The Act on Prices [3] as a framework law does not dispose over these. The requirements for the supply-safety or the recultivation, the technological, environmental requirements which are dominant factors in view of prices and expenditures are specifiable in special laws for branches only. The social interest is not the lowest price (as a short-term interest) but it follows the aforesaid requirements as long-term interests. The principles on the price formatting should be harmonized to the short and longterm interests. The special acts may give orders on the functions of authorities in the course of preliminary steps for settling the price, functions relating to supervision as well as on the specific field of consumer protection.

<sup>&</sup>lt;sup>5</sup>The topic is fully detailed by [27]

228 J. BÉCSI

If the price regulation-type intervention is possible to be applied on a certain market, then it is expedient to consider all types of intervention, and to choose the slightest one in order to achieve the goals as well as not to change the usual market conditions at greater extent than appropriate. This means transitional types of regulation, which cannot be defined as direct intervention concerning prices. Laws may prescribe orders on separating the expenditures (in order to prevent from cross-financing and to make the justified cost transparent) as well as to hold price level limitation (a.k.a. price cap).

In the relationship between the authority and the companies the rights of the companies involved under control are essential issues as well. There are important questions regarding disputing the decision of the authority and the possibilities for correction. This means a body of appeal in general, where the questioned decision is judged. In Hungary a company is not allowed to turn to a court of law, but it is allowed to apply for new decision on prices. This ensures the chance of correction.

In order to assess whether the state makes mistakes during intervention into the market mechanism by orders and regulatory authorities, namely to define what sorts of mistakes it makes, and to specify the nature of the government failures [25], we need to look over all those anomalies which appear in the sphere of the supervisory system. If these anomalies are unambiguously caused by the unsatisfactory model of the authority, the reform of regulation or the omission of the unnecessary element can improve the system. The latter one is possible primarily if the market has a good chance to converge the social optimum by controlling itself.

### References

- [1] Act XLI of 1994 on natural gas supply.
- [2] Act CX of 2001 on electricity.
- [3] Act LXXXVII of 1990 on prices.
- [4] BARR, N., Állami beavatkozás; in: Csaba Iván Tóth István György (szerk.): A jóléti állam politikai gazdaságtana; Osiris kiadó, Budapest, 1999.
- [5] BERTÁNÉ FORGÁCS, A. BOD, P. Á. NAGY, Z., A monopólium és a versenypiac között, Közgazdasági Szemle, June, 1990.
- [6] BOTEUX, M., On the Management of Public Monopolies Subject to Budgetary Constraints, *Journal of Economic Theory*, No. 3 (1971).
- [7] COASE, R. H., The Problem of Social Cost, Journal of Law and Economics, No. 3, 1960.
- [8] COASE, R. H., Some Notes on Monopoly Price; Review of Economic Studies, No. 5 (1938).
- [9] DUNAVÖLGYI, M., A piac korlátai és a korlátok piacosítása, Közgazdasági Szemle, May, 1989.
- [10] FRIEDMAN, M., Kapitalizmus és szabadság, Budapest, 1997.
- [11] GREENWALD, B. STIGLITZ, J. E., Externalities in Economies with Imperfect Information and Incomplete Markets, *Quaterly Journal of Economics*, May, 1986.
- [12] GVH, Versenyhivatali füzetek No. 6, July, 2003, www.gvh.hu.
- [13] JOSKOW, P. L. NOLL, R. G., Regulation in Theory and Practice: an Overview, in: Forman, G. ed.: *Studies in Public Regulation*; MIT Press, Cambridge, Mass, 1981.
- [14] LANCASTER, K., The Problem of the Second Best and the Efficient Pricing of the Electrical Power; Gordian Associates, New York, 1979.
- [15] LE GRAND, J. A kormányzati kudarcok elmélete; in: Csaba Iván Tóth István György (szerk.) A jóléti állam politikai gazdaságtana, Osiris kiadó, Budapest, 1999.
- [16] MARSHALL, A., Principles of Economics, MacMillan, London, 1938.

- [17] MUSGRAVE, R., The Theory of Public Finance, McGraw Hill, New York, 1959.
- [18] PELTZMAN, S., Pricing in Public and Private Enterprises: Electric Utilities in the United States, Journal of Law and Economics, No. 1 (1970).
- [19] Pete, P., Elemzési keret egy leendő államháztartási reform alapelveihez; *Közgazdasági Szemle*, October 2001.
- [20] PIGOU, A. C., The Economics of Welfare, McGrawHill, New York, 1920.
- [21] SAMUELSON, P. A. NORDHAUS, W., Közgazdaságtan; KJK, Budapest, 1988.
- [22] SCHUMPETER, J. A., A gazdasági fejlődés elmélete, KJK, Budapest, 1980.
- [23] STIGLER, G. J., The Theory of Economic Regulation, *Bell Journal Economics and Management Science*, No. 2 (1971).
- [24] STIGLER, G. J., Piac és állami szabályozás, KJK, Budapest, 1989.
- [25] STIGLITZ, J. E., A kormányzati szektor gazdaságtana, KJK-Kerszöv, Budapest, 2000.
- [26] VANBERG, V. J., The Constitutions of Markets, Essays in Political Economy, Routledge, London-New York, 2001.
- [27] VALENTINY, P., A szabályozószervezetek működése a hálózatos közszolgáltatásokban, Közgazdasági Szemle, October 1999.
- [28] Verseny és árszabályozás, Unió Kiadó, Budapest, 1991.
- [29] VISCUSI, W. K. VERNON, J. M. HARRINGTON, J. E., Economics of Regulation and Antitrust D. C. Heath and Co., Lexington, Mass, 1992.
- [30] VISSI, F., Piaci intézményrendszer, versenypolitika, uniós csatlakozás, Közgazdasági Szemle, May, 1995.