ECONOMIC EFFICIENCY AND THE ROLE OF THE STATE IN MARKET ECONOMY

Petru ROŞCA

1 Free International University of Moldova, 52 Vlaicu Parcalab street, Chişinău, Republic of Moldova, Tel.: +37322220029; Fax: +37322220028, Email: petrurosca08@gmail.com

Abstract

Economic efficiency emerges after comparing the effects of some action with the efforts needed to produce it and has general applicability in decision-making in any country. It can be said that economic efficiency is closely related to the use of resources in the economy and its essential feature is the stress/effects causal ratio.

In the competitive system of the free market, the activity of the economic agents provides performance to the extent that it has a high efficiency. Any human activity is, at the same time, resources consuming and effects producing.

In the economic theory, the concept of efficiency characterizes the activity developed in various fields: economic, social, educational, health, sports, etc. More concretely, it reflects the physical, intellectual and moral (in the deontological sense) effort made to achieve a goal or the pre-established objective, respectively the relationship between two waves: the resources spent and the resulting effects, expressed in physical (pieces, kg, and meter) or value (lei) units of measurement.

Keywords: economic efficiency; effects; efforts; performance; productive efficiency.

JEL Classification: A12, A20, M16

Introduction

Economic efficiency is used for decision-making, is synonymous with effectiveness, so that the terms of efficiency and effectiveness are used ever since antiquity.

In the field of economy, references to efficiency can be found in great thinkers of the last century, such as Adam Smith or Karl Marx.
Economic efficiency emerges after comparing the effects of some action with the efforts needed to produce it and has general applicability in decision-making in any country. It can be said that economic efficiency is closely related to the use of resources in the economy and its essential feature is the stress/effects causal ratio.

In the competitive system of the free market, the activity of the economic agents provides performance to the extent that it has a high efficiency. Any human activity is, at the same time, resources consuming and effects producing.

In the economic theory, the concept of efficiency characterizes the activity developed in various fields: economic, social, educational, health, sports, etc. More concretely, it reflects the physical, intellectual and moral (in the deontological sense) effort made to achieve a goal or the pre-established objective, respectively the relationship between two waves: the resources spent and the resulting effects, expressed in physical (pieces, kg, and meter) or value (lei) units of measurement.

For example, at the level of a certain $S$ (from system) agent, having as object of activity the production of footwear (pieces), a series of expenses ($C$) are made for providing the production factors (people, raw materials, machinery and equipment, information or knowledge, time) by whose optimal combination the result $R$ is achieved, meaning the goal: the required footwear.

So, in terms of costs, efficiency is the lowest cost to achieve the production unit required on the market.

Value is the general criterion for assessing the economic efficiency, value that is proportionally connected to the demand-supply ratio, involving regulations and procedures regarding the market and competition development, highly dynamic space due to the successive changes that occur in the business environment, under the influence of several factors coming from inside and outside the economic agents. Depending on the costs $C$ and the results (production) $R$, efficiency or profitability $E$ can be expressed by using:

1. The allocative role of the state, according to the economic efficiency criteria, equivalent to achieve productive efficiency (maximizing results or minimizing the consumption of production factors per unit of product) and allocative efficiency – the optimal adaptation of the demand to the supply. The most original and rigorous evaluation of the optimum resource allocation we owe it to Vilfredo Pareto, according to whom a state of the economy must be preferred to another one if at least one person wins without any other to lose (relative criterion), and the allocation of resources is optimal and, therefore, the collective welfare is maximum if it is not possible by a change in allocation to improve the welfare of a person, at least, without any other one to lose (absolute criterion). Starting from these assumptions, Pareto’s criterion or optimum can be illustrated by means of a
graph highlighting the limit of the utility possibilities, that is the maximum potential well-being that can be achieved by a community composed, for simplicity reasons, of only two people (A and B) based on knowledge (skills) and resources available at a certain time (Figure no. 1).

The limit of the utility possibilities defines the maximum utility that can be reached by B depending on the utility achieved by A, and the lower case letters designate the possible situations caused by the allocation of resources, namely: $a$ is characterized by a non-primate allocation of the resources as it is situated under the line designating the limit of the utility possibilities (the movement from point a towards NE improves the welfare of an individual so that no one should lose); $b$ is the result of an allocation of resources superior to the a situation, because both $A$ and $B$ obtain a greater utility, but do not represent an optimal allocation, as they are located below the limit of the utility possibilities; $c$ cannot be touched because it entails knowledge and resources above the limit of the utility possibilities; $d$, $e$ and $f$ situations satisfy Pareto’s optimum with reference to the initial situation $a$, as it improves the situation of at least one so that no one else loses (it represents optimal situations because is located on the limit of the utility possibilities); $i$ and $k$ situations do not satisfy Pareto’s optimum in relation to the initial $A$ situation, because it improves $B$’s situation to the detriment of $A$, respectively, $A$’s to the detriment of $B$. 
The points situated within the adfe zone represent situations superior to the initial a situation, but only those located on the limit of the utility possibilities line from d to e designate situations of optimal allocation.

Also, the points within the aditg and aekzh zones represent situations inferior to the initial one (a), although the points located on the limit of the utility possibilities line from t to d and from e to z designate optimal allocation situations. In summary, there is an infinity of optimum allocation situations, in the present case the infinity of points situated on the limit of the utility possibilities line from d to e denotes an infinity of optimal solutions. Therefore, it can be said that the transition from a to d is more favourable to B than to A, respectively the transition from a to e is more favourable to A than to B.

If we note by A and B the two persons, with 1 and 2 the two available goods, with \( x_A = (x_A^1, x_A^2) \) A’s consumption set and with \( x_B = (x_B^1, x_B^2) \) B’s consumption set, and \( x_A^1 \) and \( x_A^2 \) represents the amount consumed by A from good 1, respectively from good 2, and \( x_B^1 \) and \( x_B^2 \) the amount consumed by B from good 1, respectively from good 2, then a pair of consumption sets \( x_A \) and \( x_B \) is called “allocation”. Known as “Edgeworth’s box”, this may be a “possible allocation”, in the event in which the total consumed amount from each good is equal to the total available quantity.

\[
\begin{align*}
X_A^1 + X_B^1 &= W_A^1 + W_B^1 \\
X_A^2 + X_B^2 &= W_A^2 + W_B^2
\end{align*}
\]

Wherein: \( w_A^1, w_B^1 \) and \( w_A^2, w_B^2 \) represent the initial allocation, corresponding to the endowment for A, respectively for B and represents the quantity of each good that A and B consumers bring from the market.

Following the exchange, we will reach the final allocation. In point M, the quantities consumed by A are measured using the \( (x_A^1, x_A^2) \) coordinates, having as origin \( O_A \), and the quantities consumed by B are measured using the \( (x_B^1, x_B^2) \) coordinates, having as origin point \( O_B \) and, respectively, \( O_B \), we can find out the allocations preferred more by A or by B.
The exchange between A and B is carried out starting from point $M'$, representing the initial allocation, owing to which both A and B targets the increase of the utility, respectively of the satisfaction in relation to the initial state.

The region that provides superior utility to the initial endowment is determined by the consumption sets situated above the indifference curve passing through $M'$, the intersection of the two regions corresponding to A and B and representing the geometric locus of the allocations better than the initial ones both for A and for B (the shaded area in Figure no. 1, b). In the $L$ and $N$ points, A and B’s indifference curves are tangent, so the marginal substitution rates for the two customers are equal. In the event that the “contact curve” $cc$, that is the geometrical locus of all the points for which the marginal substitution rates between the goods of the two consumers are equal, then the points located thereon, between $L$ and $N$ correspond to Pareto’s optimum.

There are also other strictly economic aspects, including the balance of allocation (within “Edgeworth’s box”), the optimum balance-efficiency ratio, as well as market’s dysfunctions of allocations, but they go beyond the reason and the framework of the present paper. However, we are interested in knowing the state’s involvement in resources’ allocation, which must to be determined depending on the extent of the market’s dysfunctions of allocation (lack of perfect market transparency, monopolization of production or demand, technical or natural monopoly, existence of collective goods and externalities), such as that the loss of wealth generated by the public action to be inferior to the welfare loss caused by market’s dysfunctions of allocation. From this perspective, in solving specific problems, it would be preferable for the State to use, primarily, incentives means rather than the coercive ones.

2. The distributive role of the State that highlights that the optimal allocation of the resources appropriate for the productive efficiency and allocative efficiency imperative is a necessary condition, but not also a sufficient one of the social optimum. Not once, optimal solutions in terms of resources’ allocation were unacceptable in terms of social justice. A well it cannot be indifferent the reality that, above state’s method of involvement into the economy, the income distribution clearly determines the deterioration of the initial state of Pareto’s optimum, although this is more fair, more just and more balanced in terms of distribution. Therefore, State’s involvement presupposes defining the adequate methods of distributing the incomes and the favourite wealth, thing that suggests the possibility of treating the role of the State’s distribution in terms of costs/benefits comparison. Public and private income distribution and redistribution aim to maximize the welfare of the whole community, giving absolute priority to those underprivileged.
3. The regulating role of the State, which aims in particular the elimination of the serious economic imbalances and the stabilization of the economy, the assurance of the economic growth. To this end, the State intervenes in the competitive mechanism by adopting specific regulations, attracting much criticism, especially coming from the liberals and neoliberals, but not only. There is an opinion that by exercising such a role, the State can become the absolute master of the society, leading to totalitarianism or the hypertrophy of the bureaucratic apparatus, generating economic inefficiency. In this case, as well, it is about a rather large registry of dysfunctions, mainly changes in the evolution of the macroeconomic variables (global demand and supply, demand and supply for currency), which causes the deviation of the production volume, of the prices’ level or of the interest rate.

The objectives pursued by the State by exercising the allocative distributive and regulating roles in the economy are: efficiency (insurance of collective property with compulsory use – national defence; augmentation of the private initiative for the rest of the collective goods in cases of technical or natural monopoly as well – industrial, energetic policy, etc.; correction of externalities – environmental policy, positive externality support policy; correction of the monopolistic trends of demand and supply – fiscal, budgetary, regulatory policy, etc.), equity (income distribution, social protection insurance, support of the underprivileged categories), economic balance and growth – unemployment control and decrease, stabilization of prices and increase of the purchasing power, inflation control and decrease, balance of payments balancing and stimulation of an active balance of payments, general economic stability, economic growth and development. Once the strategic objectives of economic policy have been established and approved by the Parliament, we proceed to identifying the appropriate means and techniques for achieving them.

Conclusions

The regulating role of the State, which aims in particular the elimination of the serious economic imbalances and the stabilization of the economy, the assurance of the economic growth. To this end, the State intervenes in the competitive mechanism by adopting specific regulations, attracting much criticism, especially coming from the liberals and neoliberals, but not only. There is an opinion that by exercising such a role, the State can become the absolute master of the society, leading to totalitarianism or the hypertrophy of the bureaucratic apparatus, generating economic inefficiency. In this case, as well, it is about a rather large registry of dysfunctions, mainly changes in the evolution of the macroeconomic variables (global demand and supply, demand and supply for currency), which causes the deviation of the production volume, of the prices’ level or of the interest rate.
References
1. Bajura, T., The globalization of economic activity and differentiation of income per capita in the world. Cui. Agricultural development in post-privatization stage (Edition 2004), 137 p.
2. Biletcaia, A., Globalization, liberalization and international trade regionalization in the current period and in the future (Bucharest, ASE, 2002).
3. Dalong, D.B., Tehnologii informaţionale (Cluj, 2001), 237 p.
4. Friedman, Milton, The Role of Monetary Policy Modern Macroeconomics (Harter and Row Publishers, 1997), 513 p.
5. Fukuyama, Francis, Construction of states. The world order in the XXI century (Bucharest: Heading, 2004).
6. Georgios, Monterides, Globalization and universality – Chimera and Truth (Bucharest, 2002), 331 p.
7. Gotişan, Victor, Globalization – challenge contemporary society, causes, trends, events. Cui. Social market globalization (Chisinau, 2004).
8. Held, David; McGrew, Antony; Goldblatt, David; Perraton, Jonathan, Global Transformations. Politics, economics and culture (Polirom, 2004), p. 40.
9. Roşca, P., “Improve the mechanism of state regulation of the economy by market conditions”, in: Economics (Chisinau, ULIM, 2007, No. 3), pp. 72-88.