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Positive Motivation as the Basis of Economic Transformation towards Sustainability and Information Society

Introduction

There is the universally recognised conception of economics and economic systems management: with the help of economic instruments is possible to manage subjects' (individuals') behaviour on market. And usually the, they think, positive and negative motivations are considered as specific interchangeable equivalent. Both of them are regarded as fulfilling functions for the control of people's and economics' subjects behaviour. The authors take another point of view: positive and negative motivations execute different functions act as act as different. The negative motivation (punishments, penalties, limitations, restrictions, and so on) is the basis of carrying the present homeostasis of economics systems. But positive one provokes to revolutionary changes in the economics systems.

1. The general concepts of a system development

It is known from the theory of development that only *open stationary* systems are able to develop (Melnik, 2000). Opening of a system means that it is able to realise the metabolism (i.e. material-energy-information exchange) with external environment. Stationarity means that a system is capable to carry out the homeostasis, the state of dynamic equilibrium, or stable potentials with the environment. Keeping the level of a constant homeostasis is a vital condition for a system. It can exist only under such condition. This is the common regularity both for biological systems (organisms, ecosystems) and for social structure (enterprises, macroeconomic units).

So, the process of development of any system is the alternations of two key states: a) state homeostasis; b) state of transformation of one homeostasis into another one.

These two states are provided with two sorts of mechanisms:

Mechanisms of negative feedback carry out the level of the homeostasis. The main function of these mechanisms is to extinguish the impacts of the environment to the system keeping the constant level of the homeostasis. For example the indicators of the homeostasis of a company are its choice of produced articles and output of goods. The direction of these mechanisms is reverse to acting of external impact factor. It is why they are called negative feedback. For instance, if a demand for some goods produces by an enterprise is lowering, the company tries to compensate this by more intensive marketing activities.

If the level of the current homeostasis does not fit to the capacity of the system, it has to transform the homeostasis state. When the system has surplus of "free energy" (company has surplus of "free" capital) it has to raise own homeostasis (F.i., a firm is able to increase its output). In case of scarcity of "free energy" the system must to reduce own homeostasis (a firm lowers its output, produce more simple articles).

In above mentioned cases of the transformation of homeostasis the system uses *mechanisms of positive feedback*. They act in the same direction as the environment impact factor. If demand for any goods reduces the company refuses this article replacing for a new product.

2. The role of negative and positive motivations in the steering the economic systems

According to the traditional definition *motivation* is a relatively stable system of motives (stimulating reasons, causes to action), which defines the behaviour of certain subject. There are two main groups of motivation:

- Negative (punishment)
- Positive (encouragement)

At that we assume the identity of results of motivational impact in both groups (policy of threats and bribery).

But if we say about the methodology of sustainable development it's necessary to admit that mentioned groups of motivation differ not only in forms of motivational influence but also in functions they have.

The instruments for realising mechanisms of negative feedback in management of economic structures are based on negative motivations. Their key function is to avoid (extinguish) any changes which might lead to deviation from optimum parameters of the system. Just they fit to the current homeostasis of the system. So, negative motivation saves an old order (current homeostasis). The basic instruments of negative motivation are: strict discipline, punishment, penalty, limitation, restrictions and so on.

Positive incentives are the principal instruments for realising the mechanisms of positive feedback. This is the basis of provocation and fulfilment of progressive transformation in economic systems (see figures 1).

Thus, there is not only linguistic but also semantic coincidence between the types of motivation and feedback mechanism. Negative motivations means mostly the realization of negative feedback mechanisms, positive one concerns the implementing of positive feedback mechanisms.

3. Positive motivation as the instrument of the market regulation

The difference between two kinds of motivation might be illustrated by example of solving the concrete objective of "greening" economy.

Usually people connect the solution of environmental problem with the negative motivation (penalties, fees, fines, charges, prohibitions). It indeed was reasonable during the industrial age, when there existed only principal technology or basic constructional material(s) for technological creation of human life-supporting systems. At this time environmental technology (cleaning machines, filters, purifying equipment) was only way of environmental pollution prevention. In this situation only "press" of *negative motivation* could carry out the existing technological basis, supported by technological basis.

Now we can observe absolutely different situation. Coming of information technology gives a lot of ways for solving both the technological tasks and environmental problems through revolution raising of efficiency of life-supporting system. Now the crucial point becomes not carrying out of existing state of systems but rapid transformation of them forwards their innovation. In this situation only positive motivation is able to become a real sustain of the social development.

The main idea is to create, with the help of special key factors, the conditions, under which forming of sustainable development would be not only necessary, but profitable from economic point of view. That key factors can be:

- 1) *flexible taxes and tariff system*, which suppose the use of different facilities for producers, for those who try to "clean up" their productive cycle and do that.

- 2) *accordance subsidies and credits* to producers for technological improvements and their "greening".
- 3) *establishing of specials premiums and special labels* for the most ecological or "organic" producers and products.

The instruments of the positive motivation stimulate the development of the producer in the direction of "sustainability".

In the result of this instrument using the "clean" producers soon or later not only will take the lead among their "non-green" opponents, but forth our them from the market. This is the reaching of the main goal - transition to sustainable development.

4. The positive motivation as a powerful incentive for the market transformation forwards the sustainability and information society

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The accelerating development of socio-economic systems presumes significantly often (almost permanent) changes of a system homeostasis it's necessary to cardinaly revise the attitude to the motivational tools use.

Transition to the informational society, which assumes rapid changes of system conditions, requires the reconstruction of all system of motivational mechanisms. Tools based on positive motivation must replace influence methods based on the negative motivation.

We have a powerful law, learning and use of which can greatly rapid development processes in the society. This law is as objective as the law of gravity, but humanity couldn't realize its objectiveness till now although it was discovered about 2000 years ago. Maybe it's because this law works not in the physical environment but in the society and it doesn't have any mathematical interpretations and even certain materialistic formulation, there is an illusion of its non-obligatory work.

As everybody knows laws ignorance doesn't release people from their work. In this case because of misunderstanding of this great organizing power of human life humanity rambles through wars, distrust, mass stealing and poverty for thousands years. The name of this law is The Law of Love. Its theological formulating: "Treat others as you want to be treated".

Unfortunately, till now people think that the work of this law doesn't go beyond theology. Meanwhile this law has a great applied (temporal) meaning in all spheres of social life. And only in the case of its understanding there is an open way to the future informational society in general and to secrets of fuzzy logic in particular.

The best economical interpretation of this law the author heard from the famous Russian economist and writer professor Nikolay Shmelyov: "Everything immoral is inefficient, everything inefficient is immoral".

Positive tools have a colossal power of influence. Fortunately, the positive motivation has the same large arsenal of instruments as the negative one.

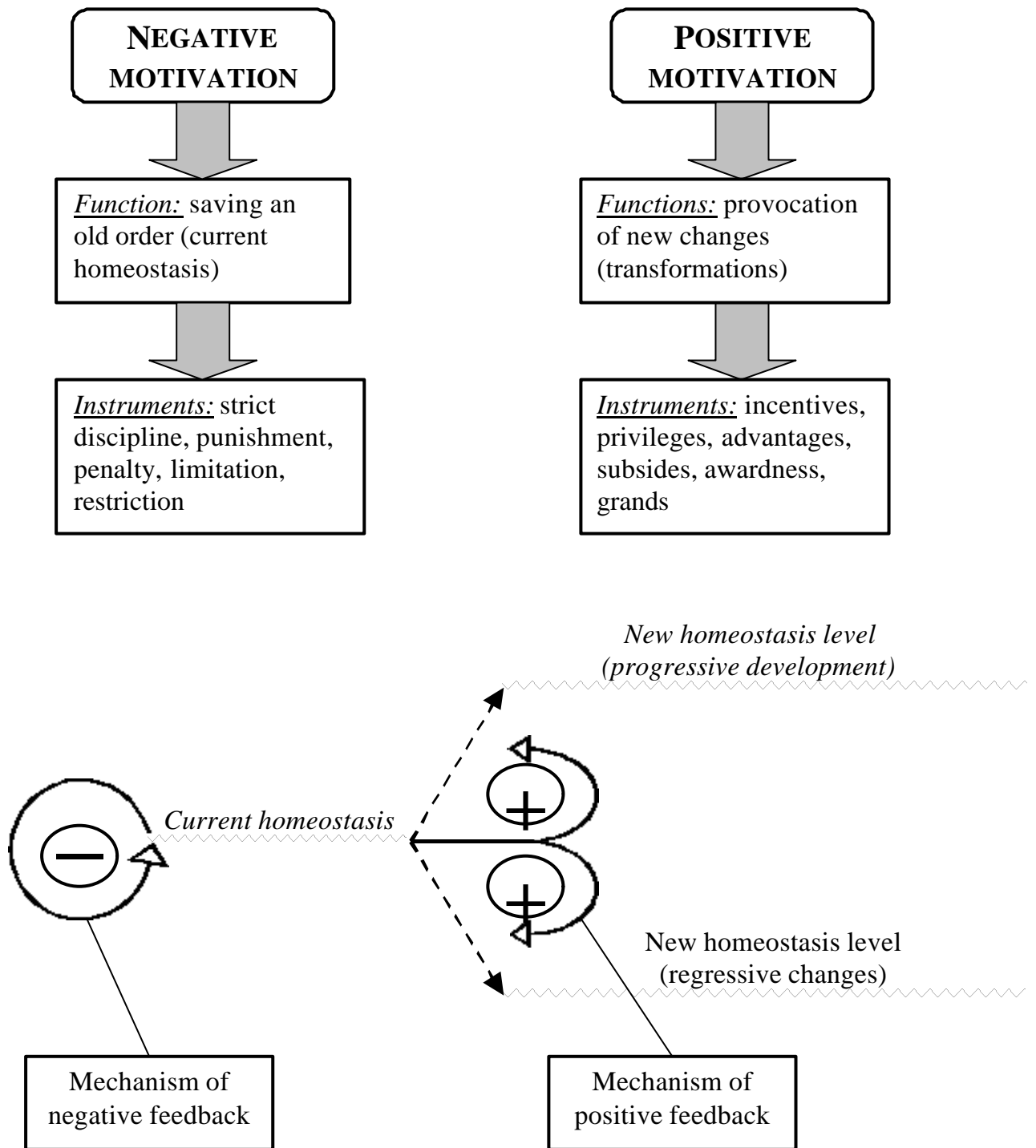


Figure 1. Functions and interrelation of mechanisms of feedback and motivation

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Nobody is principally against the keeping in the social life such a method as punishment with its infrastructure of controlling and penal elements. But the negative motivation will never replace the positive one. They just have different functions: the first one restrains? The second one wings, inspires and pushes. With all threats and penalties you'll never fly without wings.

The system of motivational instruments must be balanced: for every prohibition or punishment there must exist its antipode – stimulus or privilege. Corruption and mass stealing in our country are almost the most serious economical factor, which doesn't allow making a step forward. But we can break this "chain " only with the power and energy of the positive motivation. Let judges and prosecutors do their business but there must exist a system of civil respect and economical encouragement for those who develop native production, scientific or cultural achievements of just help improvement of life of our people.

Conclusion

Traditional system of teaching in management of economic system has to be reformed. Human society is coming into the time of constant turbulence. New conditions of accelerating development socio-economic system means the constant transformation of market. It requires principal new kinds of knowledge and skills.

Whole history of human development demonstrated the main goal for a manager or any level of an economic system control. It was carrying out the existing order (the level of current homeostasis). Now the principal subject of a manager become the transformations making. The principal instruments of progressive changes implementations are based on positive kinds of motivation. Only using the positive incentive one can achieve successful output in his/her activities. But it requires not only new knowledge and skills but new positive world outlook.

Reference

1. Melnik. L.G., 2000, Economics of Development. Sumy. "University book". - 450 p. (in Russian).