EVOLUTIONARY AND INSTITUTIONAL ANALYSIS OF THE SCARCITY CONCEPT IN THE CONTEMPORARY PARADIGM OF THE NEOCLASSICAL ECONOMICS

An attempt is made for critical assessment of a fundamental category of the neoclassical economics by means of the contemporary institutional and evolutionary analysis. The concept of the scarcity of the economic goods is critically analysed within evolutionary-biological, social and specific market's context. In the conclusion the analysis proposes an optional answer for its specific presence in the neoclassical economics as well as for the absence of any institutional projection in the analysis of the same theoretical doctrine.

JEL: B25; B52; D01; D02

A specter is haunting economics - the specter of scarcity

The concept of scarcity of economic goods plays an essential role in the modern neoclassical economics. It is the origin of a row of linkages which are influencing to a substantial degree the specific outline of the orthodox economic theory as we know it. At the same time, it has been interpreted as an axiom – given as such; generally without further analysis or it is analyzed in the aspects, which are rather of ecological, technological or another non-economic character. So, here we are to address the question: what is the reason for such a paradoxical attitude towards such a fundamental economic concept, whose importance for the "mainstream economics" goes far beyond the cliched observations for the fatal doom of the mankind.

Although, the initial idea for this presentation is old enough, it's analysis in a paper was triggered by a discussion of a paper delivered recently. My acknowledgments in that sense go for R. Avramov, G. Ganev and other participants in that discussion, as well as for A. Leonidov, P. Tanova and El. Dimitrova, who have made a lot of useful observations.

I need to acknowledge also the comments and support of Frederic Lee, Luc Tardieu and Uta-Maria Niederle provided at he EAEPE Annual Conference in Bremen, 2005. As usually, all the remaining errors and omissions remain responsibility of the author.

*

The goals of the present paper include showing how this concept functions within the neoclassics' paradigm; what are the consequences of it's application;

¹ The discussion at the annual conference of Bulgarian Macroeconomic Association was provoked by a paper on the challenging disappearance of Marxism, whose analysis has found out, sadly enough, the absence of practically any Bulgarian economic texts, written from a non-orthodox view point.

how justified is the latter from an evolutionary and economic view point and which might be its possible institutional analogues concept? All these questions are treated in the respective sections of the paper.

Here, an important qualification must be done: the historical analysis of the scarcity is of great interest itself. Though, it deserves a special additional effort, and thus, it has been excluded from the present paper and the analysis is focused on the functional dimension of the problem.

Essentially, the study represents a heterodox critique to a deeply rooted, though insufficiently investigated concept in the orthodox economics. Yet, the concept reflects its basic weakness - the lack of institutional analysis. And that is in fact our major methodological approach — to consider the scarcity form an institutional and evolutionary economics view point.

Out of that goal, the study does not claim to be placed within the domain of any specific school in the contemporary heterodox economic tradition, although it has incorporates important principles both from the institutional and evolutionary economics.

Studying scarcity

The ongoing investigation into scarcity is limited. Generally, it is not a subject of verification – orthodox economists see it as an ontological characteristic of the economy: there are simply not enough resources to produce all the goods people want to consume². That approach is based on the "apparentness" of the fact that our "spaceship Earth" (according to an economic textbook) is spatially limited; this "apparentness" is the ground for the lack of analysis of the scarcity and for the "right" to use it as *universal*, *non-changeable*, *inherent*.

If we need an example of such an approach, we may point out one of the countless issues and re-issues of the Lipsey and Steiner's textbooks where it is said straight away, that "[scarcity is]... real and eternal".

Perhaps, the main part of the contemporary literature on scarcity represents a kind of environmental treatment of the problem; some even call it "environmental scarcity". Those analyses focus on the consequences of the disappearing resources over the ecology and society. Some of the sources go as far as to investigate into the violence which will possible outburst as a result of it (Homer-Dixon, 1999).

In the same aspect, other authors bring in the so-called "green" philosophy of the 60's of the last century, warning for the wannabe ecological catastrophe resulting from the unstoppable consumerism and uncontrollable growth. Trying to expose the roots of the philosophy such as being ignorant towards sustainable development, the environmental analyses reconsider many of the ideologized schemes and offer non-traditional theoretical links — as for example,

² See for example Samuelson and Nordhaus, 1989.

³ Lipsey, Steiner, Purvis and Courant, 1990, p. 47.

interdependence between "green" philosophy and "tenets of Marxism" (Benton, (ed.) 1996).

Though much rare, other papers challenge even the very basic idea of scarcity, at least formally. Neumayer (2000), for example, differentiates between pessimistic classical economists and the optimism of "modern neoclassical economics" in terms of the trust in the unlimited growth. Hence, he postulates the logical possibility, that the growth will never be restrained by the natural resources thus introducing some doubt in the universal character of the scarcity and its mechanical consequences. Although, Niemeyer still accepts impossibility for predicting whether the scarcity of the resources will be overcome or not "in practice".

A step closer to the socio-economic approach, might be found in Raiklin and Uyar (1996) who offer a paper investigating how real is the very concept of scarcity. Acknowledging the immense importance of the scarcity for deriving "most of the current economic theory" (p. 49), the authors point out the paradoxical "scarcity of abundance" and evidently frustrated by "deliberate simplification" and "tendency to reduce" the problems by the economists the authors offer a deeper view of humans' needs and wants and thus on scarcity.

According to their point *needs* and *wishes* are different and that difference is what makes the scarcity relative concept. While the needs represent some historically, socially and culturally defined bunch of goods one *must* have, the wants go beyond them and contain "some residual desires" (Raiklin and Uyar (1996 p. 53). Thus, because of the wants-beyond-needs emerges the following paradox: the richer the society the scarcer the resources. And resolution of that paradox is the relative character of the scarcity or, using the Heilbroner (1962) expression, "scarcity as a psychological experience". More or less explicitly "scarcity of abundance" paradox is addressed to the class society of modern capitalistic economy.

No doubt, this is an attempt to treat the scarcity as a social and not universal category and even to answer the boring paradox of the rich societies. Unfortunately, that logic accepts the absolute scarcity without any challenge. And hence, the general question of what is scarcity and why it is so badly needed (and used) by neoclassical economics has not been raised again; as stated by Raiklin and Uyar "the discussion does not at all preclude the absolute scarcity" (p. 54).

What does it mean to qualify the economic goods as scarce?

The limited explicit investigation of the scarcity makes determination of the exact meaning of the concept a particular challenge. Consciously or not, the researchers seem to rely on the general meaning of the term itself. Unfortunately, that does not help much since the term itself is polisemantic, rather rarely used in English, and hence, not enough clear. It suggests shortage, lack but also limitation, i.e. that something is not ready available.

Thus, a good point for the analysis seems to be, an investigation of the purpose or implications of applying the scarcity concept; how the concept works in the logic of the established neoclassical paradigm? And the immediate implication occurs to be imposition of a model of the economic order in which the demand surpasses the supply *apriory*, as a predefined condition. Hence, the further analysis becomes already predetermined since the resources are not ready available for all potential uses (and users). Moreover, the *concept of unlimited human wishes*, which is also present in the neoclassical economics, becomes redundant, since it is already reflected by the scarcity; it does not matter how large are the individuals' wishes if *all* the economic resources are scarce.

This way a framework is set in which the separate individuals are competing for the use of all the goods and therefore the whole system of economic concepts is targeted to resolution of that initial problem – better and more rational distribution of the resources in order to overcome, or at least to diminish, the *primary* scarcity of the goods. And, that becomes the primary goal of the whole economic theory.

Moreover, often, the economic goods are tautologically defined as scarce – i.e. if they would not be scarce they aren't economic as well. And vice versa, they become scarce as far as they get economic ones. Hence, the well known example rambling in the economic textbooks about the Sahara sand, which is the last thing one will consider scarce, but which turns out such in the very moment it becomes a raw material for the glass industry.

Further, the logic chain is simple: the resources are scarce, *ergo* we must make a choice; the choice is based on the opportunity cost (how much one sacrifice from good A to receive some extra amount of good B). And, here it comes out the market which makes the choice feasible.

Maybe surprisingly, scarcity turns out to introduce the criterion for that choice, since it is the measure for the price – the more scarce⁴ goods the higher the price. The demand is mere a mechanism which makes the scarcity obvious. Eventually, the scarcity determines one's choice, since her income is already a fixed amount and she optimizes against it.

If a look may be taken more generally, one will notice that scarcity is inseparable from the orthodox theory and even it bears universalistic view to the world. The law on demand, which "derivation" engages such an effort in the neoclassic texts — just to mention the competing explanations with or without marginal utility and with or without indifferent curves, the existence of that law is actually pre-determined. The shapes of the curves, convex of the production boundary and concave of the indifference curves, they both are just consequences of the introduced scarcity and turn the proof of the law or if one prefer the derivation of the demand curve (Lipsey, Steiner et al., 1990, p. 145) into a not-too-complicated sophistic.

⁴ It is better to say the *relatively* more scarce goods have the higher price since the scarcity concept has been used just as measure for comparison rather than an absolute measure.

And, the result of application of that pre-determined concept is an overall picture of imbalance, shortage and lack of goods which confront the individual (and the mankind as a whole) with the difficult choice of maximization or optimization, but which never allows him to reach a satisfaction; if the latter is achieved the scarcity will vanish and the whole (neoclassical) economics with it. (When this picture is followed by an "elegant" comparison – if even the affluent societies face scarcity, what to say about the societies with 200-300 US dollars annual income per capita, then the ideology comes straight.)

At the same time, the scarcity of the resources is not subject of verification. It is based upon the apparentness of the fact, that everything which exists of our spatially limited planet is discrete, and hence, limited. This trivial observation is placed at the ground of the refusal to investigate the essence of the scarcity and of the "right" to use it as eternal universal, unchangeable, and economically inherent. As mentioned above, it is seen as "real and eternal".

Thus, instead of functioning as an economic category, the scarcity functions as a predetermined axiom. In the neoclassical economics, such a situation is not a surprise; it happens with other concepts as well. The firm is such a phenomenon existing, but unexplained by the theory. In some texts it is just defined as "atom of behavior on the production...side" (Lipsey, Steiner et al., 1990, p. 44) (perhaps because of an implicit, but not manifested physical analogy).

Often, the cases of such pre-determination of the concepts are identified relatively easy and being subject of severe attacks by the opponents. The aforementioned concept of the firm for example is an object of endless analyses inside and outside the orthodox economics during the most of the last century, aiming at it's "proving"; in fact this analysis strive to find the economic grounds for existence of the firm without challenging the superiority of the market as efficient decision maker of the production.

Unfortunately, it is not the case with the scarcity, which enjoys a rather undisturbed existence as a *natural state of the art* in economics. But, is it a fact? Do one has a good reason to think about the (economic) world as a place ruled by permanent shortage, lack, limitation (all those are synonymies of scarcity) of resources?

In order to challenge this perception, we are going to presume hypothetically, that the scarcity indeed is embedded in some characteristics of the material world, which surrounds us and those characteristics are projected over our economic relations. Hence, our first step is to target our suspicions toward our biological nature and to suppose, that scarcity is universal biological phenomenon, and because of that it is projected over the society imposing to it a certain restrictions.

Scarcity: an inherent biological concept?

Evolutionary political economy, as well as Veblen's classical institutionalism, uses a number of ideas or analytical tools borrowed by the biological concepts, like

instincts for example, seen as a form of institutions shaping the behavior of the individual including her social behavior. In that aspect, the relevant question would be: is the scarcity inherent to the bio-systems and could that be the ground to apply it as well to the economic relations?

For example, similar logic is applied to explain some specifics of the competition, by building over the aggressiveness of some biological species. The competition is taken as a reflection of the inherent aggression in the social continuum and thus, it is believed to have a *natural* existence.

If that be the case, it would be justified to accept the rightness of a principle according to which, a species (let say of animals because they are closer to us a as a human beings) live in the condition of scarcity. Hence, for its existence and development that group constantly needs more resources than the available ones and it is forced to optimize its consumption in order to survive. That seems bizarre. The biological experience show rather different picture — if a species live in shortage of resources it is malfunctioning, wither or even become extinct; just to recall the anecdotic dinosaurian case.

Another opportunity is to suppose that the certain species has occurred in scarcity because of changed environmental conditions. Indeed, this is the Darwinian principle of evolution of the species. That principle though, does not state that within the changed conditions the group lives in scarcity of resources. Just the opposite, the main point of this principle is that the shortage resources force the species to change, to adopt (or to perish), and by no means, that certain species live imbalanced or in disequilibrium. On the contrary, within the new conditions the adopted group, with its new qualities may have even better opportunities to develop.

There is no need to go too far with the biological concepts here, but it is clear to us, that scarcity could not be accepted as the inherent characteristic of the existence of the biological specie *Homo sapiens*. Actually, such a perception to the world repeats the Malthusian approach. And, it bears implicitly, all his grim projections for the humankind future doomed to starvation and misery. If the analysis is consistent, we should accept that the two concepts differ just by their dynamics – Malthus projects starvation over the time, and the neoclassical scarcity is even more powerful – it exists here and now.

Scarcity: a general social phenomenon? Or scarcity and the traditional society

Even if the scarcity is not accepted as a biologically inherent to the mankind existence, there is still space for that phenomenon to be born by the social structures. The question here is: Is it feasible to accept, that the society imposes such characteristics of its members which lead to shortening of the resources? Or, as with the case of education, the human beings as social individuals acquire features (and needs), rudimentary developed or even completely not-known in their biological ontology. And those newly-adopted features develop further in a manner

leading cause the available resources to become scarce. Is it possible, that the society breaks down the proportions between the consumption of the individuals and the available resources?

This is somehow a tricky question; faced with the tremendous amounts of wasted resources and polluted environment one is quick to say yes, but the careful look shows that, in terms of material needs, people have not changed much for the last 5-6 thousands years. Second, the idea for society includes by definition a civilization, which among the other things means more efficient production; even the first steps in that direction – breeding cattle and domesticated the corn plants offer tremendous increase of the efficient use of the available resources. Third, contrary to the common reason the population in the most consuming countries shrinks, and this should mean by any logic a decrease of the needed resources.

Shortly, it is much more reasonable to view the society (even in it's less developed forms) as satisfying the material human's needs better than it is done by its pure biological existence. Actually, that is the primary reason for the society to emerge and develop!

What concerns the spiritual needs, the perception that they are limitless is of course conceivable; but when looking to the reality one will easily notice that they in fact are shrinking totally substituted to the material ones. (It is pointless to even enter the discussion how spiritual are the soup operas, blood-drained action movies, reality shows etc.)

The serious debate here is, that contrary to the picture of imbalance and shortages, drawn by the application of the scarcity concept, the historically existing traditional society is stable and well-balanced; it produces as much as it needs (in general case of course, excluding occasional calamities and disasters). And most important – the traditional society needs (and wants) what it has been produced.

The above statement should not be seen as an attempt to reinforce the instrumentation of equilibrium over the heterodox analysis, but just as a mere recognition of the simple fact that given the normal conditions, the above cited differentiation between the needs and desires would emerge as an exclusion under extreme conditions rather than a rule. If that picture seems over-idealized to someone, it might be useful to recall that in some countries, it existed in not so distant times. Just two generations ago, it still existed, even in some European areas, the well known seasonal life-circle, nicely portrayed in the art, throughout the history - from the Egyptian frescos to the drawings of Peter Broegel: summer as the time of strong work, winter – of the rest, feasts and rites; the working day is framed by the daylight etc. etc. Things are familiar enough and do not need to be emphasized further.

Let assume for a while the existence of an opposite opportunity: a general social principle (and hence, the economic concept) forcing the people towards the everlasting increase of the consumption. Then the seasonal life cycle of the traditional society would not be possible – resting and feasting season is simply intolerable; if nothing else, an individual could weave and knit all her "free" time

and hence, will have the opportunity to change her new clothing 4 or 5 times per year instead of the usual one change. Or, in order to consume more food and clothes she could saw just potatoes and flax instead of fruits and vegetables. Let's imagine the contemporary concept of ever-changing fashion transferred in a village just 50 years ago – all the family work endlessly in order to secure a new dress every week for the daughter. But, unfortunately, their neighbor has bought a new horse – so now the head of the family should get a loan from the village usurer, which to be re-paid 20-25 years ahead in order to advance.

The picture is ridiculous because it never existed in the traditional society, but it is quite clear for our purpose – there is no an all-valid social feature forcing the humans' needs ahead of the available resources and means for their satisfaction. Hence, there is no general social situation which might be described as scarcity of the resources.

Historically, the traditional society develops such a system of needs, which could be completely economically satisfied with its available level of technique, organization and experience in any particular moment. In this way, the society exists synchronically with the nature and accordingly, it does not perceive its resources as scarce. As far as, in critical situations – draught, calamities etc., those resources could be really limited for a certain period of time, the societies either adapt or extinguish. Examples of vanished civilizations are more than enough.

As a whole, the concept that the traditional societies have been living in scarcities, privation and restrictions does not find support in the facts.

The specificity of the market (commercial) society and the scarcity

If one can not find proofs that the scarcity is all-society feature, perhaps it could be assigned to the particular type of society. That sounds more reasonable; the logic of the contemporary commercialized society is not a secret for anybody – the more you sell the more you earn. Hence, someone should buy more and more, i.e. the surpassing consumption seems welcome by that particular form of society in order to secure an ever-increasing return of the process.

If so, then it is just a matter of technique to create built-in specific mechanisms into the market, which will guarantee ever-advancing needs. Those may include marketing and advertisement, imposing and frequent change of the fashion tendencies, the excessive use of ready available (and seemingly cheep) credit cards etc.; the well known set of instruments securing in the individual, the wish to spend more than she produces (or earns).

I am far from underestimating the importance of the various mechanisms and models (see Galbraith, 1984 for details) of behavior in the modern commercialized society, which, eventually, are responsible for the situation, where humankind already exhausted more than 30% of its irreversible natural resources and put on risk the wellbeing of the future generations. Although, it seems, that

even such irresponsible consumption, which, ironically, could make *scarce*, every resource in not-so-long-term perspective, even that behavior could not justify the presumption for scarcity in the way one finds it in the neoclassical economics. Indeed, the increased needs (no matter how they were expanded - naturally or by aggressive advertisement) are satisfied with increased production; i.e. they could not exist out of the opportunity for their satisfaction. And this follows familiar pattern; the individual exists and functions to the extent of its abilities; attempts to go beyond the latter just show a deviant personality, which is led eventually to a self-destruction by her or his unrealizable ambitions.

True, there are some social groups, which derive some advantage by motivating human behavior, leading to situation, where the resources controlled by the same powerful groups become more and more scarce, that very fact does not mean that the scarcity is something *inherent* to the resources.

To conclude, the only real phenomenon that has been reflected by the neoclassical concept of scarcity is the fact that all the economic resources (and or goods) are not free, are not ready-available to all individuals who otherwise would like to use them.

But this is a completely different story as we will see below.

An hypothesis: scarcity is a surrogate for another economic concept

The above analysis showed that there are no grounds to accept the axiomatic character of the scarcity of the resources neither as all-biological, nor as a all-social nor even as specific commercial-economy principle. At the same time, its large use (and usefulness!) for the neoclassical economics lead one to the hypothesis that the scarcity is a substitute concept, which reflects certain specificity of the economic reality remained by certain reason unexplained within the neoclassical paradigm.

If this hypothesis seems ostentatious to someone, she may recall again the case with the firm. By reasons which analysis goes far beyond the current paper the neoclassical paradigm uses the firm just as axiomatically given, without proper reasoning. Indeed, there is a number of competing explanations, but none of them is sufficiently good. Just as an example, the firm has been explained as a nexus of contracts, last-order organizer of the production and even distributor of the resources (or of the information). Inevitably, each oh those explanations are always confronted by a certain unresolved question – why the firms are needed if the market could perform all of the mentioned functions and even better than the firms. The invisible hand is supposed to be a perfect organizer, not bad contractor and distributor of the information. The case with some modern IT-companies (CASIO was such an example) sounds anecdotic – they may contract away all the elements, assembly, placement, advertisement and even the development of new items; perhaps the only thing they own is the registered mark. Nonetheless, even in those cases, the firm is needed again; an economic structure to encounter the

other structures on the market. This way the question which is thrown away trough the door comes back through the window.⁵

The purpose of the presented analogy is nothing more than to demonstrate that the neoclassical paradigm encompasses facts, which it could not explain, and that for it *acclimatizes* them, regardless are they axiomatic by its essence or not. As mentioned above, the firm is treated as an "atom of behavior from the production or supply side". To say it another way, it is an atomized brick of the production. A logic, much rather following the perception, that atoms are just atoms, which build up all the structures. And respectively, the firms are just firms, which make feasible all the economic structures. Unfortunately, this mechanistic picture of the reality is century old does not hold very true today. But, the problems of modern firm theory are really beyond our interests in the current survey.

Going back to the presented above hypothesis one should ask the question: is it possible the features ascribed to the scarcity to be evidence of presence of different element of the economic reality, institution, causing the same functional causal connections? And respectively, could one find another economic concept explaining the same connections better?

The suggested answer is positive. What is the functional essence of the scarcity is the fact, that the goods are not free, not ready accessible and not ready available to everyone who would like to use them. This is nothing else, in my opinion, than an extended (analytical, functionally if someone prefer) description of what is the *ownership* as an economic reality and as a category of the economic knowledge. To determine the resources as scarce, limited, does not mean anything else than to determine them as *being owned* by someone or something, by a social structure (government, community or else).

This way, the orthodox economic theory by introducing the scarcity, actually introduces the institutional dimension in the economics. Or, if needed to be most precise, it introduces the influence (practical functioning) of the institutions without mentioning them explicitly. This statement actually, touches one very interesting phenomenon of the neoclassical economics. It is not secret that the latter ignores such tremendous by their importance questions of the economic system like institutions, evolutions, historic specificity etc. What is actually puzzling, is, how the economic model built on this paradigm can function at all. One of the possible answers is that the neoclasssics introduce implicitly at least some of those fundamentally intrinsic features of the economic system. In the concrete case it introduces the institutional characteristics of the economic resources in the society by calling them scarce.

This way the neoclassical doctrine is in the position, which allows it, to introduce the ownership in the functioning of its model, without even a single line of analysis of it. If the things are scarce in an economical sense then it is needless to

⁵ Specific issue is the question which of the mechanisms – the market or the corporate optimises better; although it is quite different story and we just mention it here.

say that the same things are owned (need to be owned, to be someone's property). Or saying alternatively, the orthodox economics introduces anonymously a whole system of institutions, and this way it can continue further.

For example, to say that all the economic goods are scarce and even the opposite that they *must* be scarce in order to be part of the economic world. So, without explaining why and how the sand become scarce when discovered by the glass industry, the orthodox economists introduces the mere fact that it has being appropriated – even just by the fact that it is loaded to someone's device or just by being fenced for the needs of certain glass firm.⁶

*

We have provided here the analytic discussion of one concept playing such an important role in the paradigm of the neoclassical economics, yet remaining at the same time aside from the attention of both orthodox and heterodox theoretical critique. Our discussion was targeted on finding the grounds for its own existence.

While attempting to assign the scarcity as a reason for behavior of the individuals and for functioning of the societies in evolutionary-biological, all-social and specifically market aspects, we arrived to results that have not proved positive. In the three relations, within which we analyzed the behavior of individuals, resp. of economic agents, we have concluded that the scarcity is by no means an universal feature. As far as the resources are limited in one or another moment of development of a certain bio- or social structure, they impose its adaptation toward themselves. If that adaptation is successful, the structure continues to develop, if not – it extinguishes. Hence, in none of the three cases we could claim that the development under scarcity, limitation, privation etc., is feasible and thus may be presented as an all-human or all-social feature.

In spite of such outcome, not so surprising actually as a result, the scarcity is used widely in the neoclassical economic paradigm; even more, we could say that the two are inseparable. That brought to existence the suspicion, that its use, actually, substitutes for another important component in the neoclassical economics, which is not addressed directly by any reason. This way, we have reached the conclusion that the scarcity in fact defines the property as an institutional dimension of the model; the most important features imposed over our perception for the economy by assuming the resources for scarce, is that they (recourses) are not essentially free and equally ready-available for everybody, i.e. they are already appropriated in form of different objects of ownership.

The fact, that property "absorbs" very well the functions "assigned" to scarcity is not the only ground for acceptance of our hypothesis; more important is that it explains good one of the strangest paradoxes of the neoclassical model - the

⁶ Actually, if we are careful enough, we will see the irony; introducing the property perfectly well explains why that particular resource (sand) has become scarce, while the scarcity-concept, could not provide such an explanation.

lack of institutional dimension in it. If the heterodox criticism is correct, as regards the orthodox model it should not function at all because of its ignorance of the institutions. The only possible explanation for its "vitality" is that it introduces the institutions implicitly, covered by another form, as different concept. Namely, that is the scarcity. Postulating that resourses are scarce, scarcity actually "institutionalizes" the resources, assigning them to different economic subjects, whose main task then becomes "optimization of the scarce resources".

References

Benton, T. (ed.). The greening of Marxism. New York, London, Gilford Press. 1996.

Galbraith, J. K. The Affluent Society, 4th ed. Boston, Haughton Mifflin, 1984

Earle, J. S. What is an Institution? - Journal of Institutional Economics, 2005, 1, 1, p. 1-22.

Heilbroner, R. L. The Making of Economic Society. Prentice-Hall, Engelwood Cliffs, NJ, 1962.

Hodgson, G. Evolution and Institutions. Cheltenham, UK, Northhampton, MA, USA, Edward Elgar, 1999.

Hodgson, G. The present position of economics' by Alfred Marshall. -Journal of Institutional Economics, 2001,1, 1, p. 121-137.

Homer-Dixon, T. E. Environment, scarcity, and violence. Princeton, Princeton University Press, 1999.

Howard, M. C., J. E. King. Where Marx was Right: towards a more secure foundation for Heterodox Economics. - Cambridge Journal of Economics, 2001, 25, p. 785-807.

Lipsey, R. G., P. O. Steiner, D. D. Purvis and P. N. Courant. Economics, 9th ed. New York, Harper and Row, 1990.

Marshal, A. 1XXX. Principles of political economy, London.

Neumayer, E. Scarce or Abundant? The Economics of Natural Resource Availability. - Journal of Economic Surveys, 2000, Vol. 14, N 3, p. 307-335 (29). Samuelson, P. A. and W. D. Nordhaus. Economics, 13th ed. New York,

McGraw-Hill, 1989.

Raiklin, E., B. Uyar. On the Relativity of concepts of needs, wants, scarcity and opportunity cost. - International Journal of Social Economics, 1996, Vol. 23, N 7.

8.II.2006