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Absolute Goods and Natural Externalities: Problems of Accounting, Control and Analysis

Advanced theoretical approaches to assets require their investigation by dividing business environment into living, inanimate and intelligent matters. The articles aims to reveal ecological and economic essence of the living sphere's assets and their modification for creating a management system with accounting, control and analysis functions being adequate to current challenges.

The problem of accounting, control and analysis of resources of the sphere of living matter is addressed by dividing its assets into groups: absolute goods (humus, grain, straw, cattle, dung), and natural externalities (sun energy, atmospheric air, fresh water, areas of water' biocenoses, and dry valleys, insects pollinating plants). Use of physical and economic measuring tools for accounting, control and analysis of assets in the sphere of living matter is grounded.

The regulations of the newest market and monetary paradigm relevant to this problem are illustrated. The urgency of creating the system of management with administrative functions modified by the given principles is shown.

A new vision and interpretation of assets as objects of accounting, control and analysis calls for change of the existing paradigm of these functions in the modern economy. It allows for creating the system of management with modified functions of accounting, control and analysis, to meet ecological and economic requirements.

Taking into consideration the importance of the discussed problems, the above mentioned ecological and economic approaches are suggested to be taken as the basis for modification of international and national standards and other regulatory acts on accounting, control and analysis of entities' activities.

Keywords: *resources, the sphere of living matter, assets, absolute goods, natural externalities, accounting, control, analysis.*

Introduction. Accounting, control and analysis carry out the functions delegated to them in the systems of business administration under conditions of the adequate determination of these objects. Their proper identification is the pledge for these objects disclosure and assessment, also for obtaining the economic benefits from their efficient utilization by economical objects.

Literature analysis and problem setting. The problems of how to determine and interpret these objects were studied by numerous scientists in the area of accounting, control and analysis [1–3; 5–7; 11; 18]. However, these works did not always and fully take into consideration the ecological-economic aspects of the objects under analysis. At the same time, the necessity of their research taking into account the ecological-economic challenges has risen essentially. That is why the issue of their appropriate identification and interpretation has becoming increasing topical.

The aim of the study is to reveal ecological and economical essence of the living sphere' assets and their related modification for creating the system of management with accounting, control and analysis functions being adequate to current challenges.

Results. Ecological-economic resources as objects of accounting, control and analysis. VladimirVernadsky, the academician, during his stay in Ukraine as the President of the Academy of Sciences, founded by him, once noted in his diary that "we know nature badly and do its accounting even worse" [4]. The thinker divided the

nature surrounding people as their lives environment into living, inert and intelligent, and the exploration of each of these spheres by people he considered as economies. The contribution of academician Vernadsky in the perception of a living matter, inert, and intelligent is considerable. As a result, he developed the study about the bio-, geo- and noo-spheres.

The conglomerate of the research should be considered as the fundamental scientific foundation of the creation of the new paradigm of accounting, control and analysis meeting the challenges of the 21st century. While substantiating this paradigm theoretically and economically, it is necessary to state that the living is not always and not necessarily is intelligent, though the existence and the development of the intelligent is possible exclusively under conditions when the intelligent is living. Concerning the inert, it is to become the projection of the living and is to be under intellectual control by all means.

The more detailed consideration of the living, the inert, and the intelligent spheres as objects of accounting, control, and analysis requires its structuring into constituents. The most important among them are resources, processes, and results of the economical exploration of these spheres. In order to interpret professionally these constituents in this paper's context, they are to be considered as assets, activities. Also the technological and financial results of economic operation of subjects carrying out the economical activities in the spheres under research should be analyzed.

The sphere of the living matter should be considered as the determining one among the others. Owing to its importance for people economical live it should be interpreted as the high priority object for accounting, control and analysis. The assets deserve the priority consideration both here and in other spheres.

From the view that it is necessary to take into account this sphere's peculiarities, the resources of the living matter are proposed to divide conditionally into two groups, which exist in the organic symbiosis with each other, distinguishing the absolute goods and externalities within assets. Simultaneously, it should be noted that the approaches offered are not taken unto account in both international and national standards and other regulations coordinating the executing of accounting, control, and analysis over different objects, particularly, over biological assets.

The physical economics, i.e. the industry founded on the natural bases of the economic study initiated by physiocrats serves as a fundamental scientific base for interpreting the absolute goods as the innovative objects of the accounting, control, and analysis.

The contemporary person, utterly devoted to its Ukrainian scientific school, Mykola Rudenko, rejects the monopolistic domination of political economy in the economic science. He criticizes the Karl Marx', then Adam Smith's doctrines from the positions of physical economics. He proved that the political economics that operates with the "accounting categories (apart from natural science!) not only prevents us from understanding economic processes, but also gives birth to incredible mistakes and economic distortions" [16, p. 225].

The Ukrainian intellectual distinguishes five absolute goods that are the most important for people's economic life. These are: humus, coin, straw, cattle, and organic origin fertilizers [20]. All together these goods constitute the absolute wealth. They have no alternatives, and nothing can substitute them. From the view of people's needs satisfaction, they have no alternatives to each other: the deterioration of quality or absence of one of them makes impossible the existence of people.

Mykola Rudenko interpreted the set of absolute goods as a capital, i.e. as a value able to produce the added value. The physical analog of the absolute added value produced by the absolute capital the thinker named the progress energy. His collection of economic-philosophical works containing five variants of the progress energy formula has the same title [16].

The theory of the golden section comprised the base of the formula. The former was founded in the so called Eternal proportion. This fundamental constant if the world formation has been studied by numerous scientists for hundreds and thousands years, including Luca Pacioli, the founder of the accounting as a science.

This constant subject to in-depth economic-philosophical content introduced by Mykola Rudenko, is inherent to that part of the progress energy formula that is related to the added value being produced and describes both the bio-energetic structure of cereals harvest (coin and straw), and the other part of the formula related to the social distribution of the absolute added value, describing the harvest distribution between the anti-entropy (farmers) and entropy (industry and government) spheres of the society.

And if the modified, based on the physical economics accounting provides the relevant fact graphic information for control and analysis, then the latter, while operating by the world formation constants, will obtain the new base for comparisons and search of similarities constituting the base of the methodology how to carry out the control and analysis*. Thanks to operating by these constants, they are able to become the governing functions in the sphere of the live. The comparisons (confrontations) of fact graphic information with the norms (their role is to be played by the world-formation constants) will enable one to control and analyze the producing and distribution of absolute goods on the principally new scientific grounds.

This is the reason why it is necessary to substantiate the up-to-date scientific approaches to the construction of the accounting, control, and analysis in the system of absolute goods.

New approaches to the accounting, control, and analysis of absolute goods

The problem of ecological-economic identification and interpretation of the objects for accounting, control, and analysis acquires the paradigmically new importance according to the content of the progress energy formula variant that describes the future of the mankind. In the context of the problems under research, it is becoming increasingly topical proceeding from several circumstances.

First, the progress energy formula is the model of a number of symbioses in the sphere of the living matter, primarily of the absolute goods symbiosis. It should be stressed, however, that the formula gives prospects to people to obtain the limitless absolute goods. The latter must be carefully monitored as the determinants for the current and future people's operation for sake of their lives.

So, regarding the humus, it deals with the fertile layer of the planet, which "has accumulated the boundless solar energy for endless centuries" [16, p. 365]. Mykola Rudenko was scientifically confident that the humus layer of the planet is "the most useful of all the mankind owns" [16, p. 309]. This definition gives birth to the most topical for the mankind objectives of accounting, control, and analysis.

The thinker proved the limitless potential of obtaining the most valuable of goods, – i.e. the coin. "Bread comes from the Space, one should only learn to take it, – the Ukrainian intellectual stated, – It will come in any amount, because the potential of cereals is practically inexhaustible" [16, p. 295].

Second, there is a variant of the formula developed able to describe the future of the mankind, thus, the prospective one. It will enable people to use it for preventive control and analysis of each good and goods inter-relation.

Mykola Rudenko pointed out several times to the necessity to realize that the "progress energy comes to a nation only through the land" and foresaw that thanks to the economical efforts keeping to the natural laws "the limitless amount of wheat will appear" [16, p. 361].

The thinker tried to imagine the planetary herd consisted of several dozens of billion capita, because "this very amount of cattle is necessary in order to feed the contemporary mankind at the expense of the pastures". He faced the question, "Where should one take so many pastures? And where should people live themselves while having this amount of cattle?" [16, p. 280]. The issues raised make topical the objective of keeping the proper number of cattle capita taking into account of the well-known experience when sheep "have eaten people" ("dealing with reacing pastures by deserts and the environment of Great Britain and other countries as a result of the out of control cattle pasting").

The thinking by analogs allows respectively imagining the limitless organic fertilizers – due to the controlled, "built into the nature increase in the number of cattle capita, which in this context, and is to be considered as primarily the producers of organic fertilizers as the irreplaceable by mineral fertilizers absolute good".

It should be stressed that some of the above forecasts were partly confirmed by the calculations of the potential possibilities of the modern economies. The calculations by the Viennese Professor Bernd Lotch show that one thousand farmers, who keep their economies according to the principles of the contemporary Austrian farmer-innovator Sepp Holtser, are able to feed the number of the Earth's inhabitants that is three times more than the existing one. The professor's optimism is based on the suggestion that when other farmers who are utterly devoted to the learning exemplified by Sepp Holtser, will implement each more than 100 projects in different world countries, which will enable them to provide food for more than 21 billion people [19].

Third, the variant of the energy progress formula opens the prospects for innovative interpretation of the market by Mykola Rudenko and for the respective modification of accounting, control, and analysis in accordance with the challenges of the new market paradigm.

While appealing to Francois Quesnay who "derived the added value from the nature itself, i.e., from the ability of the land to give harvests and thus to increase our riches", Mykola Rudenko pointed out to "that part of the production that a farm does not consume, but brings into the town, to the market-place". In his deep confidence, "The civilization begins from this very market-place site" [16, p. 365].

The Ukrainian intellectual revealed the deficiency of the Adam Smith's theory, which "derives everywhere the appearance of the labor products exchange from the *subjective*, not objective reasons, dictated by the natural laws". In such a way he approached the "inevitable character of agriculture, the origin of the real product economy" [16, p. 386].

Thus, one should take into account the substantiated and based on physical economy innovative paradigm of the market different from other ones. According to M. Rudenko, a market exists due to the surplus of coin. This very surplus causes the arising and development of exchanges between absolute and relative goods and intellectual products.

The coin is the determinant asset for continuing life on the Earth. It is the resource, objective, not subjective (e.g., people eager to trade with each other etc.) or even mystical (similar to the 'invisible hand') base of the market. The movement of the coin surplus creating the market must be free, not spontaneous, meaning the lack of hindrances to the superiority of natural laws, primarily, to the law of energy conservation and transformation.

The free flow of coin it its movement is able and keeps on creating the greatest phenomenon – civilization. It covers the market itself and the state and other social, economical, political institutions, culture, science, education etc.

According to this paradigm, the market and the state are able and should interact, not to confront to each other. Only the market as a free flow of coin is able, in its turn, to result in the limitless amount of coin. Only it is able to be the resource base of the development called sustainable, and to guarantee the protection of successors' interests.

The fundamental character of this scientific base allows formulating the appropriate definition of the market. We propose to define is as the limitless coin for successors. This Rudenko's definition is both sufficient and favorable for continuing life on the Earth [20]. It becomes increasingly topical for the accounting, control, and analysis now, when half the planet's population has only $ 1–2 income a day, and one billion of the Earth's inhabitants experience daily the threat of death from starvation.

Fourth, in the context of the possibilities of producing the limitless absolute goods under research, it is expedient to introduce the concept of 'boundless assets'. We propose to use the word 'sizeless' in order to eliminate the vexing mistaken translation of the Russian term 'intangible', as a result of which the concept 'boundless' is often applied as the synonym of non-material, intellectual, and other 'unable to be touched' assets [12–13; 21].

Fifth, this variant of the progress energy formula requires applying the concept of 'boundless values' in the accounting, control, and analysis that was introduced by Mykola Rudenko.

"There are no devices for measurement able to calculate the incoming and outgoing energy, – the Ukrainian intellectual states. – However, without accounting, we would not know what sort of energy the society and a person own. Thus appears ... the very precise physical device, having no measures..., the money".

"Physics is unable to operate any sizeless value, it needs dimensions. It arises only when the extremely harmonious proportionalities appear... Before... people cognized nature ... with the help of metaphysics".

"The money is metaphysical because it is sizeless. ...In its supreme essence it is the portion of solar energy....This quant itself is also sizeless: today's it bears one amount of energy, tomorrow – the other. Everything depends on how much harvest has been gathered..." [16, p. 104–105].

Tracing directly the metaphysical fundamentals of measuring process, Mykola Rudenko emphasized, "Light and only light is moving everywhere, because it is a substance. And everywhere its movement has a quant character. Then why the laws of light should be lacking in our movement? Isn't it so because we lack the devices to measure it?" [16, p. 105].

According to the results of the comprehension of the civilization types separated on the metaphysical and physical-economic grounds, Mykola Rudenko made his conclusions on the bio-energetic potential of each of these types expressed in bio-energetic units. Their specific 'filling' depends on the volumes and productivity of the explored goods, in particular, of the harvest collected.

Thus, the bio-energetic potential of the civilizations based on aqua- and grass cultures he determined in the volume of two bio-energetic units by each type of civilization, and that of the civilizations based on coin cultures he thought equal to five bio-energetic units [16, p. 116, 355, 359]. So, the aggregate energetic potential in the symbiosis of civilization types studied accounts for nine (2+2+5) bio-energetic units.

Sixth, the variant of the formula under research is the base for separating the grounds for the monetary system, which will serve the future of the mankind until the latter has a need for its existence.

Viewing the continental and global financial-economic crisis spreading over Europe and over the world, the principally new vision of the money and the monetary system, given by M. Rudenko, is becoming increasingly important. Already a quarter of century ago he stated, "The coin, nothing else is slowly becoming the substantial filling of the money at the world's market" [16, p. 341]. And at the end of his life he proved that "it is the most expedient to make a ton or a hundredweight of wheat the standard of value" [16, p. 394].

The thinker was confident that "if that were the case, hundreds millions the Earth inhabitants would be saved from starvation death" [16, p. 394]. Thus, the introduced by M. Rudenko interpretation of money as a 'measure of life' is acquiring the planetary size safety significance [17].

Seventh, the variant of the progress energy formula is establishing the base for constructing the innovative model of economic equilibrium, which, by its ontology is based on the law of even and uneven numbers [16, p. 116–117]. The reaching and sustaining of the equilibrium in the fundamentals of physical economics is to be subject to control and analysis both in the real, and in the monetary sectors of an economy.

Mykola Rudenko discloses the content of economic equilibrium by the following equations:

Between, on one part, the obtaining of the progress energy, and, on the other part, the creating of the absolute capital and the satisfaction of the entropy requirements of a society;

Between, on one part, the absolute capital, and, on the other part, the energy of progress at the expense of which it was created, and the entropy caused by it.

Between, on one part, the entropy, and, on the other part, the energy of progress, thanks to which the entropy is compensated, and the absolute capital are created.

Considering each of equations from the extremis view (minimum and maximum points) in the context of the above opportunities to produce limitless absolute goods, one can see that the first equation describes the maximization of the progress energy, the second one gives the conditions of the absolute capital maximization, and the third one gives the conditions of entropy minimization.

"...Of all kinds of people's activities only agriculture compensates the entropy losses of the Earth's civilization, our contemporary resumes, – and the rest of social sphere work for the entropy completely". Mykola Rudenko points out that 'Sergey Podolynsky understood the entropy role in the aging and death of civilizations in the deepest way of all Earth's people. "The thinker emphasizes that 'The Universe as the ultimate organism (enormous, but yet finite) is to take care of and cares about its own protection against the entropy. This relates, no doubt, to any planet and to each living creature..." [16, p. 378].

The Mykola Rudenko's conclusion results in the increase in the significance of the control functions while revealing the facts of the entropy losses and the functions of the function-costs analysis while finding out the reserves to decrease the entropy.

Eighth, taking into account that the energy of progress formula contains the important not only by its form but also by its content innovative potential, its innovative variant under research allows constructing the model of the innovative development of the economy.

Mykola Rudenko reveals the innovation and added character of the matter (and respectively of the energy and of the substance) on the new basis different from that known to the economic science. Only the physical economics is able to explain their appearance on the each. The thinker shows why physiocrats called *the production* meaning only agriculture, because it is the only sphere where the new *added matter* is produced... It is absolute because it is absolutely *new* for the planet. It has just come from the Sun" [16, p. 380].

Ninth, proceeding from the above statements, the variant of the formula under research shows the strategy of the implementation of the mission allocated to Ukraine.

Mykola Rudenko tried to extend the understanding of the elite state of Ukraine on the Earth. The thinker stressed that "for centuries, this land had been conserved for the determining lesson in the history of Mankind, called globalization today...". He was confident that the 'Earth civilization approaches its final examination, and its results will to a large extent depend on whether Ukraine is able to pass this examination. The God should prevent it from the misunderstanding of its mission on the planet, – the thinker warned [16, p. 391–392].

According to Mykola Rudenko's forecasts, made even before 2002, Ukraine were during the further decade (i.e., up to the year 2012) "to attain the productivity of agriculture to 100 million tons of coin products a year" [16, p. 392]. The thinker called to derive from there the economic strategy of Ukraine [16, p. 393]. And if, according to Mykola Rudenko, the Earth is to be the granary of the Solar System, [16, p. 363], then Ukraine's challenge is to become the granary of the Earth.

Rudenko's forecasts are confirmed optimistically by the contemporary Austrian farmer-innovator Sepp Holtser. While staying in Ukraine in 2012, he expressed his firm confidence that he was staying in the "granary of Europe. ...So, Ukraine is famous for the fact that it is able to feed the whole Europe"... [10].

Therefore, we face the objective to build the management system having the functions of accounting, control, and analysis that are to be adequate to these global challenges.

Problems of nature externalities' accounting, control and analysis

Externalities are an important component of assets as objects of accounting, control and analysis being inalienable from absolute goods.

The rise in externalities (external effects) in general sense is caused by managerial subjects' activities. From the ecological and economic point of view externalities are

positive or negative effects of managerial activity of a certain subject on nature as well as other subjects which are not its suppliers, buyers or competitors.

Positive influence of natural externalities is first and foremost manifested in preservation of environment due to which photosynthesis becomes possible as the guarantee of producing and accumulating absolute goods. Objectively necessary for this are five conditions being the most important. They are solar energy, atmospheric air, drinking water, biosenosis of oceans and dry land, insects – pollutants of plants available in nature.

Like absolute goods positive externalities being determinant for man's vital functions exist in the aggregate. It should be stressed on integrity of aggregates: absolute goods (which as is shown above are inseparable from each other as well as externalities which are also connected among themselves).

The stated principles determine some tasks of the investigated functions taking into consideration the specificity of externalities as their objects. The main thing is to provide supervision (periodical inspection or continual monitoring) of observing ecological and economic requirements the performance of which will guarantee the preservation of absolute goods, the producing and accumulating of which is possible in the natural surrounding being not ruined).

The necessity to account, control and analyze ecological and economic costs aimed at preserving and increasing the studied assets should also be borne in mind.

The solar energy is a determinant factor for providing photosynthesis, preserving absolute goods, positive influence of externalities and vital activity of people. Stressing on the role of the solar energy Mykola Rudenko wrote: "When we say 'the Earth' we once again mean the Sun since the fertile stratum of the Planet which in itself over the innumerable centuries has accumulated the enormity of the sunlight energy is implied" [17, p. 365].

Our contemporary fought for the idea of the national science school founder of physical economy S.A. Podolynsky who expressed the following: "The surplus value is the surplus Sun energy that is used by the earthworkers through agriculture" [17, p. 395]. The Ukrainian devotees of physical economy in their statements stressed on close interaction of externalities with absolute goods and economic importance of the sunlight energy in their accumulation, in particular.

The atmospheric air is regarded to be determinative for man's vital activity alongside with the sun energy. "In order to exist we need not only food but oxygen, too. Deserts do not make it; forests, fields, meadows do produce it", Mykola Rudenko underlined [17, p. 294]. Comprehending his observations of the Earth atmosphere from Outer space L. Kadenyuk, the first cosmonaut of Independent Ukraine, indicates that "the only natural protection of our Planet from possible cataclysms is its atmosphere... It is extremely vulnerable and is practically not protected...It was especially painful to contemplate large–scale consequences of unreasonable man's activity: the atmospheric pollution by industrial emissions, seas and oceans pollutions by oil products inundations as well as smogs over industrial centres, forest fires, black storms and so on" [8].

All this transfers the problem of externalities (especially influences of the earth atmosphere, air, oxygen) into a plane of all people's safety and raises essentially new tasks of accounting, control and analysis. Drinking water as a guarantee of life giving moisture the circular motion of which is created by the World Ocean belongs to externalities the influence of which on man's activity like the sun's energy and atmospheric air is also of vital significance.

Deeply realizing the life giving role of water Sepp Holtser, the author of unique ecological and economic systems including permaculture and aquacultue invented by him, considers that the main task of economy is "to give the Earth's body a drink" [19]. When being in Moldova, where as in Ukraine, he introduces his experience, S. Holtser stressed: "If it is possible to understand how nature works, ... to see what is capable to do using available...nature resources, water in particular, to learn how to handle it right..., then 70% of work in agriculture is done"... In the same way he expressed about the soil: "If ...you understood and learned to treat the soil right it means that you did 70% of work" [9]. Then taking into consideration the specificity of externalities' action

namely water influence, their proper control and analysis will provide sensible guidance of mastering determinative ecological and economic factors in management.

The sunlight energy, atmospheric air and drinking water taken as symbiosis in their organic aggregate create photosynthesis the ecological and economic phenomenon of which realized the devotees of the Ukrainian science school of physical economy. As M. Rudenko put it, "the seeds of chlorophyll recycle the sunlight into organic substance. Afterwards the plants die taking with themselves solar energy into the soil. In such a way during milliards of years the humus stratum of the Planet was being created...– accumulator of the sun energy. A plant indeed reminds of a solid electric discharge between two poles – leaves absorb the new sun energy, the root gives up the energy from the accumulator" [17, p. 56].

Invariable is the positive influence of biocenoses which perform a range of unique functions for vital activity of people. Thus, absorbing from the air carbonic acid biosenoses of oceans and dry lands at the same time produce life giving oxygen to people. Besides biosenoses of dry lands namely forests, meadows as well as other natural and artificial plantations accumulate and keep moisture, absorb the noise and so on (simultaneously performing the given to them economic role of timber, herbs and other plants, nuts, mushrooms, berries (as well as pastures for herding) suppliers.

A classical example of a positive externality is interaction of an apiary and an apple tree orchard located close by: the bees promote to increase the apple yield and the apple trees induce to enlarge honey gathering, their owners having no market relations. It becomes possible due to insects-pollinaters' activity – first and formost thanks to bees and also to bugs, flies, butterflies, flower wasps and so on as non-alternative condition for taking up the harvest of plant majority.

The bees play an essential role in pollination of flowers. They are just the most numerous group of pollinaters in ecosystems connected with flowers. As pollinaters the bees are extremely important in agriculture since they are more effective pollinaters than bugs, flies, butterflies, flower wasps and other insects.

Like bees and other insects irreplaceable in plant pollination the earthworms' and grubs' influence as well as microorganisms should be regarded as positive externalities on which nature put unnoticeable but non-alternative role in soil fertilizing.

Like the academician Volodymyr Vernadsky as well as the other outstanding intellectuals Mykola Rudenko stated that "humus was a living body. It is full of bacteria, rain worms and so on, and so forth" [17, p. 327]. "But if we saturate the soil with chemical fertilizers (relative productive energy) and do not supply it with manure (absolute productive energy), our contemporary warned, the rain worms will perish. So will also do the bacteria which remake the humus stratum into a living body. The soil structure will become worse as it is the rain worms which increase nature fertility by letting it pass through themselves" [17, p. 294].

Taking into consideration these, at first sight insignificant, but indeed determinative principles is of great importance for ecological and economic context of externalities' accounting, control and analysis as "absolute surplus value, M. Rudenko proved running the risk of being blamed for 'heresy', – makes the rain warm" [17, p. 294]. The stated theses allow drawing a conclusion that the newest scientific identification and interpretation of the objects of accounting, control and analysis cause essential changes of the existing paradigm of these functions in enterprises' economy management. It is caused above all by changes in vision of deep essence of assets.

Conclusions. Management in the sphere of a living being requires idispensable taking into consideration of specificity of those assets which according to the chosen ecological and economic clause context are absolute goods and natural externalities. Modern scientific foundation of these assets investigation needs their accounting, control and analysis in organic symbiosis that should be observed between the selected assets groups as well as within them where they are divided into interrelated varieties of absolute goods and natural externalities. Drawing attention to opportunities of gaining lots of absolute goods calls for substantially new tasks which are set to accoun-

ting, control and analysis. Implementation of those tasks requires obligatory taking into consideration interaction and natural influence on awareness of people controlling the accumulation of absolute goods.

The stated approaches propose to lay in the basis of modification of international and national standards, and other normative documents to regulate the realization of accounting, control and analysis of managerial subjects' activities.

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Абсолютні блага і природні екстерналії: проблеми обліку, контролю та аналізу

Обґрунтовано необхідність застосування фізико-економічних вимірників для обліку, контролю та аналізу активів у сфері живого. Висвітлено дотичні до цієї проблеми положення новітньої ринкової і монетарної парадигм. Вони створюють адекватну основу побудови сучасної моделі економічної рівноваги, дотримання якої має бути об'єктом належного контролю та аналізу. Доведено необхідність побудови системи менеджменту з модифікованими на викладених засадах досліджуваними управлінськими функціями.

Ключові слова: *ресурси, сфера живого, активи, абсолютні блага, природні екстерналії, облік, контроль, аналіз.*

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Обоснована необходимость применения физико-экономических измерителей для учета, контроля и анализа активов в сфере живого. Освещены положения новой рыночной и монетарной парадигм, которые касаются этой проблемы. Они создают адекватную основу построения современной модели экономического равновесия, соблюдение которой должно стать объектом надлежащего контроля и анализа. Доказана необходимость построения системы менеджмента с модифицированными на изложенных принципах исследуемыми управленческими функциями.

Ключевые слова: *ресурсы, сфера живого, активы, абсолютные блага, природные экстерналии, учет, контроль, анализ.*