ON THE PROBLEM OF ESSENCE OF ECONOMIC DIAGNOSTICS

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Problem definition. In the process of formation and development of a market economy in Ukraine an active change of priorities in domestic economics <u>is</u> takinges place. This is a natural process which is aimed at adapting scientific knowledge to new challenges of changeable reality and studying the processes and phenomena typical of objectively existing economic environment. Economic knowledge <u>is</u> gradually becominges more complete, branched and dynamic. For example, <u>business enterprise</u> economics<u>y ef</u> <u>enterprise</u> has developed from <u>-the matter of fact "dry"</u> analysis of technical and economical parameters and mechanistic concepts of industrial management to the development of methods of measuring potential and <u>conducting constructing</u> the enterprise strategy on the basis of <u>concept of w</u>holistic marketing <u>concept</u>.

However, in the Ukrainian economics there are some problems which require at least their awareness by the scientific community, for they cannot be completely solved in the nearest future. This is proved by the paucity of articles in the cited editions and general backlog failing of the Ukrainian economics to keep pace with from the global "mainstream" and even from some post-Soviet countries.

One of the <u>approaches</u> tendencies in <u>business</u> <u>business</u> <u>economics</u> <u>of</u> <u>enterprise</u> <u>which</u> <u>is</u> being actively developed <u>recently now</u> is economic diagnostics. This is a fairly new trend, so it has some <u>deficiencies</u> <u>problems</u> <u>of</u> <u>imperfections</u> in conceptual <u>frameworksystem</u>, classification and methodology; the place of the economic diagnostics in the system of enterprise management is not defined, etc.

<u>The latest research and scientific publications analysis.</u> Observation of recent research. Economic diagnostics <u>has been</u> actively developed in Ukraine in the 2000s. This direction of economics is one of the few in which the domestic science school occupies a leading position among the countries of the former USSR. The term "diagnostics" is not used in foreign publications in the sphere of economics, however, the basis of domestic economic diagnostics <u>has</u> undoubtedly included the works of world classics on the economic analysis and forecasting.

In Ukraine, the conceptual problems of economic diagnostics have been considered by such specialists as O. Getman, T. Zagornaya, O. Kuzmin, N. Kuzmina, O. Melnik, L. Norik, Sh. Omarov, N. Sagalakova, I. Sokirinskaya, O. Stepanenko and others.

The purpose of the article. The purpose of this research is to determine the key elements of economic diagnostics as an economic category and to define its place in the system of enterprise management.

According to the purpose of <u>the</u> research the following tasks have been set and solved: the main features of diagnostics as an interdisciplinary category have been described; <u>the current existing</u> definitions of the concept of economic diagnostics <u>have been were</u> studied, the place and role of economic diagnostics in enterprise management <u>have been were</u> defined.

The main results of the study. Like any other interdisciplinary term "diagnostics" has several interpretations in various fields of scientific knowledge. The greatest recognition and promotion ilt has received the greatest recognition and promotion in such fields as medicine and engineering. In recent decades the introduction of this term into the social sciences and humanities in particular, economics, law and pedagogy has been is observed, in particular, economics, law and pedagogy, but due to the relatively brief small experience of using the term "diagnostics" and instability of its interpretation in these sciences, we consider it appropriate expedient to distinguish the essential features of the diagnostics as an interdisciplinary category from the fields of medicine technology.

Originally the term "diagnosis" was formed in medicine and meant a section in clinical medicine, "which studies methods of examination of the body in order to identify the nature of a disease, justify the diagnosis, prescribe treatment and develop preventive measures ... The task of diagnostics is not only to recognize the essence of a disease, but to study the environmental conditions which have negative influence on the body" -[1, p. 347].

One of the basic concepts of medical diagnostics is the concept of "diagnosis", which means "a <u>concise short medical comment conclusion on about</u> the nature and essence of a disease" [1, p. 347]. Thus, the diagnosis is a certain <u>inference conclusion</u> of an expert about the state of a system at <u>a particular time. It is an Very</u> important is the fact that the diagnostics <u>implies is</u> not only making diagnosis (determining the current state of a system), but covering a much wider range of issues as genesis (definitioning of external and internal processes <u>leadinthat ledg</u> the system to a certain state) and prediction (forecasting system

development, working out the measures for prevention of the system undesirable wanted states of the system).

Initial data for diagnostic studies in medicine are obtained with the help of numerous methods of diagnostics methods. At this stage, there appears one of the theoretical and practical medicine key problems of theoretical and practical medicine: the choice of economically expedient (in a broad sense) research methods providing the amount of information for establishing an accurate that ensures the correct diagnosis.

In <u>books on specialized subjects</u> special literature the technical diagnostics is considered as a branch of knowledge including the theory and methods of establishing the state of technical systems, as well as principles of diagnostic tools [2]. The technology the term "diagnosis" is also widely used in technology; it is referred to an expert opinion professional conclusion about the object operability tional integrity of the object, indicating the type of malfunction, its causes and ways of fault repair if there are any. The evaluation can be both qualitative (in terms of "good repair – in bad repair") and quantitative (degree of efficiency).

Technical diagnostics solves a number of interrelated tasks [2]:

- the diagnosis task, i.e. recognition of the current state identification of a technical object;

- the forecasting task, i.e. prediction of the future state of an object on the basis of certain assumptions;

- the genesis task, i.e. determining the state of an object in the past, finding out the causes of the current state.

With the increasing complexity of <u>units under test diagnosis objects</u> the level of entropy of their informational environment increases and <u>a number of several</u> problems related to ensuring a rapid response to possible malfunctions appear. One of the key characteristics of technical systems is <u>structural design</u> <u>diagnozibility</u><u>field maintainability</u> or controllability [3]. Controllability should be provided at the <u>design</u> stage-of <u>designing</u> to <u>rapidly</u>_detect malfunctions and their causes-<u>rapidly</u>.

Operation of a technical system is characterized by a variety of external and internal parameters. In <u>addition At the same time in a variety of parameters</u> a number of subsets are distinguished <u>in a variety of parameters</u> (basic parameters, related parameters, structural parameters and defects), a combination of elements of these subsets forms a subset of diagnostic parameters. It contains information about the malfunctions which are kept under control.

Both in medicine and in technology the concept "diagnostics" is used in two meanings: as a discipline and as a synonym for "diagnosing", i.e. the process of diagnostic study. In both fields, the term "diagnostics" is rarely used independently, due to the semantic nature of the term. In medicine, it is connected with the subject of diagnostics (diagnosing of certain diseases), in the technology – with to object (diagnosing of any given type of machinery).

Summarizing the<u>mentioned</u> above, <u>one we</u> can determine the diagnostics as an interdisciplinary term which means a branch of knowledge aimed at <u>studying</u> the theory and methods of analysis<u>study</u>, evaluation and forecasting of the <u>an</u> object development, working out the measures to eliminate or prevent <u>the system</u> malfunctions of the system. Diagnostics is also referred to as troubleshooting process, i.e. diagnostic study. The principal characteristics of a diagnostic study include the following:

- Thethe unit under test object of diagnostics is complex stochastic system or its subsystems ;

- <u>**T**</u>the purpose of the diagnostic study is identifying abnormalities in the development of the system;

- iInformation environment of the system is characterized by a high degree of entropy;

 – Rresearch base is the formation and evaluation of a set of diagnostic parameters according to the purpose, the object<u>target</u> and the subject of research;

 – A<u>a</u> set of diagnostic parameters should ensure maximization of the relevance and <u>information</u> quality of <u>information</u> while minimizing <u>the</u> material <u>cost</u>, time and financial <u>expenses</u> costs;

– One of the most important stages of diagnostics is <u>the</u> studying <u>of</u> the cause-effect relation between the system and the external environment.

In the above definition, the term "development" is used in a general sense, i.e. as a <u>qualitative change</u> process <u>of qualitative change inin</u> the object <u>in the course of over</u> time, which is an essential feature of all open wholistic systems. Thus, <u>the system state</u> diagnostics <u>of the system state</u> can be considered <u>as</u> a special case of diagnostics of development, as while diagnosing the state of the system at any time it is necessary to study cause-effect relations, that brings us back to the category "development".

The aforenameda forenamed features should be <u>considerably largely</u> inherent to diagnostic studies in the field of economy <u>as well</u>. As it has been already mentioned, one of the <u>biggest most important</u> problems of economic diagnostics is <u>economic terminology vagueness indistinct economic terms</u>. As a rule, most researchers give <u>their own interpretation to</u> the category of "economic diagnostics" their own interpretation. Table-1 shows the basic definitions of economic diagnostics proposed by the Ukrainian experts specialists.

<u>After the analysis Having analyzed of</u> the definitions <u>presented given in</u> Table 1 and several other definitions, we <u>have</u> made the following conclusions:

– <u>i</u>In the process of evolution, economic diagnostics has developed from one of the <u>economic analysis</u>
<u>directions lines of economic analysis</u> to an independent branch of economic science;

- <u>T</u>there is a certain duality in interpretation of the <u>economic diagnostics</u> concept of <u>economic diagnostics</u> as a branch of knowledge and as direct diagnostic stud<u>yies</u>;

- <u>m</u>Most authors do not use the term "diagnosis" in defining the concept of diagnostics; they do not create "extra concepts" which need their further interpretation;

A<u>a</u>lmost all authors emphasize the importance of the <u>environmental factors</u> influence of environmental factors;

- <u>Mm</u>ost authors specify the determination of the current state and development prospects of the enterprise as a purpose of economic diagnostics.

In our opinion, the authors of existing researches do not take into account one of the aspects of diagnostics – the predictive one. Retrospective data must be processed and structured in such a way as to not only to characterize the state of the enterprise at some moment of time, but also to provide an opportunity to further forecast, followed by setting and adjusting the goals and objectives of the enterprise.

Table 1

Economic Diagnostics Definitions of economic diagnostics

Nº	Author and <u>yeardate</u> of publi <u>cationshing</u>	Definition
1	Stepanenko O.A., 1999 [4, p.5]	"In this paper diagnostics is defined as the direction of economic analysis aimed at identifying the problems of the enterprise under the conditions of high entropy of its internal and external environment and developing recommendations for their solution".
2	Sokirinskaya O.G., 2004 [5, p.7]	" Economic diagnostics is the process of defining the state and identifying the problem of object functioning by circumstantial evidence; this process is connected with the development of ways and directions of their <u>possible</u> solution".
3	Zagorna T.O., -2006 [6, p.16]	" Economic diagnostics can be defined as a set of methods of qualitative and quantitative analysis for predicting and evaluating the effectiveness of using the company resources to achieve the objectives of business development, taking into account external constraints within strategic <u>management functional</u> areas of <u>management</u> ."
4	Norik L.A., —2008 [7, p.6]	" Economic diagnostics is an <u>analytical</u> information_ <u>analytical</u> processing_ of <u>studying</u> the_an object which is aimed at quantitative and qualitative evaluation of its state and development features, identification the problems, classification of their symptoms, <u>the</u> <u>causes and choice of methods</u> determination_ of the causes and the choice of methods for eliminating the factors of the negative impact".
5	Melnik O.G., –2010 [8, p.10]	" It is proposed to consider diagnostics of enterprise as a target evaluation and identification of its state, trends and prospects of its development based on business indicators in order to develop a structured information base for making reasoned management decisions which are aimed at eliminating problems and weaknesses of the organization or taking the chance of operating conditions and advantages of the enterprise".
6	Kuzmina N.V., 2011 [9, p.8]	"Economic diagnostics is a scientific field that studies economic system as an object of research (taking into account the structure and industry- <u>practices</u> specific features) in order to make an economic diagnosis of the state under the influence of activity factors and incomplete information with the help of special diagnostic tools".

Based on the aforesaid_, we can formulate the following definition of economic diagnostics as a research and as a branch of economic science:

– Eeconomic diagnostics is a targeted research of the economic system of any level of the hierarchy in relation with to the external environment in order to identify deviations and <u>undisclosed hidden</u> possibilities on the basesis of a specific defined set of parameters.

– Eeconomic diagnostics is a branch of economics that studies the diagnosis tools for diagnosing which determinesing the best methods to identify trends in the enterprise development of the enterprise under the conditions of objective uncertainty and seeksing the evaluation criteria (system of indicators) which takeing into account the industrial peculiarity and research purposes.

There is also no consensus among experts on the place of diagnostics in the enterprise management system. As <u>it</u> is known, <u>the_any</u>_management system includes the subject, the object and <u>the</u> mechanism. The latter, in its turn, consists of two subsystems: the functional and supporting (see [10]). The functional subsystem includes hierarchically ordered functions, methods and management tools; the methods are understood as ways of implementing the functions, and tools as both technical or logical techniques (algorithms) which are used to influence the object under control. Thus, the hierarchy of elements of the functional subsystem is as follows: functions > methods > tools. Subsequently_₇ we will proceed from these assumptions.

In some earlier studies $[5, 11]_{,\overline{\tau}}$ it was suggested that the diagnostics must be introduced into the <u>business</u> management of enterprise on a function level. In our opinion_ $,\overline{\tau}$ this point of view is not quite correct_ $,\overline{\tau}$ because the function is an integral part of the management process. The cycle of management functions forms a closed circuit, one for each level. But diagnostics for functioning of the management system is not necessary and is episodic.

N.V. Kuzmina believes that the diagnostics is a tool of management activity [12]. This point of view is difficult for us to accept, because the volume of the category "<u>of</u> diagnostics" does not meet the requirements for its classification as a management tool. The tool itself is an abstraction which does not haves neither <u>a time</u> duration <u>n</u>or specific purpose and, as a result, cannot lead to changes in objective reality. Diagnostic study suggests some purpose-oriented actions to study the data and form new knowledge about the diagnosed system.

In our opinion, the closest to the truth is the view according to which the diagnostics is "a component of <u>-the</u> control functions" [13, p. 13]. Indeed, in the process of diagnosing system development <u>diagnosing</u> some deviations from the ideal state <u>are discovered</u> which generally takes the form of a set of plans; the causes of these deviations are found and the information necessary for further management decisions is obtained. Consequently, due to availability of all the necessary attributes diagnostics can be defined as a method of control. In the process of diagnosing <u>a</u> set of tools <u>is used</u> for economic analysis and forecasting <u>in</u>, through which the management object is studyied, is used.

Conclusions and prospects for further research. Thus, economic diagnostics should be considered in three different aspects: as a research process, as a method of control and as a branch of economics.

Firstly, economic diagnostics (diagnosing) is the target study of development of economic system at any level of the hierarchy and its relation <u>to with</u> the external environment to identify the deviations and <u>undisclosed hidden</u> possibilities based on a specific defined set of parameters.

Secondly, economic diagnostics is a method of management <u>control</u> functions <u>of control</u>, as the conclusions obtained on the basis of the incoming information are used for the correcting the <u>current existing</u> management decisions and adoption of new ones, that is the essence of control as a function. To achieve its goals diagnostics uses the tools of economic analysis, evaluation and forecasting.

Thirdly, economic diagnostics is a branch of economic science which studies diagnostic tools, determines the best methods to identify trends in the company development under the conditions of objective uncertainty and selects the most suitable estimation parameters.

On <u>SummerizingSummarizing -the</u> -results of the research, we <u>have come to the conclusion</u> found that the main focus of existing studies and <u>proprietary author</u> methods of economic diagnostics is on the evaluation of the company's state at a particular time. The need of evaluating the company in its development is postulated by many authors, but there is no generally accepted diagnostic model which would to be focused on the <u>company</u> development of the company in a changing external environment with taking into account of the influence of the interaction processes of interaction inprocesses in relation to with other industries and markets. This defines opens -a broad prospects for further research in this direction.

References

<u>1. Antonov, O.K., Babiy, B.M., Babichev, F.S., Bazhan, M.P. etc (1980), Ukrainskaya sovetskaya</u> <u>entsiklopediya: v 12 tomakh [Ukrainian the soviet encyclopedia : in 12 volumes], Glavnaya redaktsiya USE,</u> <u>Kyiv, Ukraine, vol. 3, 544 p.</u>

2. Safarbakov, A.M., Lukyanov, A.V. and Prakhomov, S.V. (2006), *Osnovy tekhnicheskoy diagnostiki* [Principles of technical diagnostics], IrGTU, Irkutsk, Russia, 216 p.

3. Bushuieva, M.Ye. and Beliakov, V.V. (2001), "Complex technical systems diagnosing", *Proc. NATO Project SfP–973799 Semiconductors 1st Workshop*, pp. 63-98.

4. Stepanenko, E.A. (1999), "Diagnostics in control of an enterprise marketing activity", Thesis abstract for Cand. Sc. (Econ.), 08.06.02, Odessa State Economic University, Odessa, Ukraine, 20 p.

5. Sokyrynska, I.H. (2004), "Economic diagnostics and management of financial maintenance of the enterprise", Thesis abstract for Cand. Sc. (Econ.), 08.06.01, National Metallurgical University, Dnepropetrovsk, Ukraine, 20 p.

<u>6. Zagornaya, T.O. (2006), *Ekonomicheskaya diagnostika* [Economic diagnostics], tutorial, Izdatel'stvo «Nord-Press», MEGI, Donetsk-Makiivka, Ukraine, 523 p.</u>

7. Norik, L.O. (2008), "Diagnostics of the coke-chemical enterprises competitiveness", Thesis abstract for Cand. Sc. (Econ.), 08.00.04, Scientific-Research Centre of Industrial Problems of Development, NASU, Kharkiv, Ukraine, 20 p.

8. Melnyk, O.H. (2010), "Polycriterial diagnostic systems of machine-building enterprises activity on the basis of business indicators", Thesis abstract for Cand. Sc. (Econ.), 08.00.04, Lviv National Polytechnic University, Lviv, Ukraine, 2010. – 48 p.

<u>9. Kuzmina, N.V. (2011), "Diagnostic providing of the management process at reacreational enterprises", Thesis abstract for Cand. Sc. (Econ.), 08.00.04, Tavriia National University named after V.I. Vernadskii, Simferopol, Ukraine, 20 p.</u>

<u>10. Protopopova, V.O. and Stasiuk, N.V. (2011), Rozdribnyi tovarooborot pidpryiemstva: mekhanizm</u> <u>upravlinnia [Retail turnover of enterprise: management mechanism], SPD Kupriianov V.S., Donetsk, Ukraine, 225 p.</u>

<u>11. Sahalakova, N.O. (2006), "Economic diagnostics of mercantile business' work", Thesis abstract for</u> <u>Cand. Sc. (Econ.), 08.07.05, Kyiv National University of Trade and Economics, Kyiv, Ukraine, 20 p.</u> 12. Kuzmina, N.V. (2009), "Essence and place of economic diagnostics in the enterprise management process", *Economics and Management*, no. 2-3, pp. 58-61.

<u>13. Kuzmin, O.Ye., Melnyk, O.H. and Ivanets, L.V. (2011), "Diagnostics in system of process-structure management", Visnyk Natsionalnoho universytetu «Lvivska politekhnika», no. 714, pp. 10-14.</u>

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Purpose. The purpose of this research is to determine the key elements of economic diagnostics as an economic category and define its place in the system of enterprise management.

Methodology of research. A number of methods and methodological approaches have been used in scientific problem studying and results obtaining. In particular, basing on a review and analysis of the literature the essence of economic diagnosis and identified its main characteristics as an interdisciplinary category has been studied and proved. Basing on the use of historical and logical methods has been formed the definition of economic diagnostic as the process of economic systems studying and as the economic science branch that studies the methodological and theoretical basis for such studies. Basing on an analysis of recent publications the place of economic diagnostics has been defined in the enterprise management system as a method of control management function.

Findings. So, the economic diagnostics must be considered according to three different points of view: as a research process, as a control method, and as a branch of economic science. As a research process economic diagnostics (diagnosing) is the purposeful study of the economic system on any hierarchical level in its interrelation with the environment. In the management system economic diagnostics is the method of control management function. As a branch of science economic diagnostics studies diagnostic toolset, searches optimal methods to identify a system development trend in the conditions of objective uncertainty.

Originality. The comprehensive approach has been used for improving the essence of the economic concept that replenishes the accumulated experience of Ukrainian economics, as well as the interdisciplinary essence of the diagnostics category

Practical value. The results of follow study will lead to reduction of uncertainty in the economic terminology, that will improve the quality of economic researches.

Key words: diagnostics, economic diagnostics, economic analysis, control, prediction.

References

1. Ukrainian Soviet Encyclopedia: 12 volumes. / [Antonov O.K., Babii B.M., Babichev F.S. etc.; chief editor Bazhan M.P.]. – Kyiv.: Editorial Board of USE, 1980. – Vol. 3. – 544 p.

2. Safarbakov A.M. <u>Basics</u>-Principles of technical diagnostics. / A.M. Safarbakov, A.V. Lukianov, S.V. Prakhomov. – Irkutsk: IrSTU, 2006. – 216 p.

3. Bushuyieva M.Ye. Complex technical systems diagnosing. / M.Ye. Bushuyieva, V.V. Beliakov. // Proc. of NATO Project SfP-973799 Semiconductors 1st Workshop. - Nizhniy Novgorod, 2001. - Pp. 63-98.

4. Stepanenko E.A. Diagnostics in control of an enterprise marketing activity: <u>Autor's abstract of the</u> Manuscript. T_thesis for <u>a candidate degree in</u> an economics candidate's degree by <u>:</u> speciality 08.06.02 / E.A. Stepanenko; Odessa State Economic University. – Odessa: 1999. – 20 p.

5. Sokirynska I.G. Economic diagnostics and management of financial maintenance of the enterprise: <u>Autor's abstract of the Manuscript. T_thesis for a candidate degree in the field of economics_ sciences by:</u> specialty 08.06.01 / I.G. Sokirynska; National Metallurgical University. – Dnepropetrovsk, 2004. – 20 c.

6. Zahorna T.O. Economic diagnostics: tutorial / T.O. Zahorna. – Donetsk-Makiyivka: «Nord-Press», MIEH, 2006. – 523 p.

7. Norik L.O. Diagnostics of the coke chemical enterprises competitiveness: <u>Autor's abstract of the</u> Manuscript. T<u>thesis for a candidate degree in economics</u> the degree of the Candidate of Science in Economics. Speciality 08.00.04 / L.O. Norik; Scientific-Research Centre of Industrial Problems of Development, NASU. – Kharkiv, 2008. – 20 p.

8. Melnyk O.H. Polycriterial diagnostic systems of machine-building enterprises activity on the basis of business indicators: <u>Autor's abstract of the Manuscript. T thesis for a doctor degree in economics</u>the Degree of Doctor of Economic Sciences, <u>:</u> specialty 08.00.04 / O.H. Melnyk; Lviv National Polytechnic University. – Lviv, 2010. – 48 p.

9. Kuzmina N.V. Diagnostic Providing of the Management Process at Reacreational Enterprises: <u>Autor's abstract of the Manuscript. T thesis for a candidate's degree in economics on:</u> speciality 08.00.04 / N.V. Kuzmina; Tavriya National University named after V.I. Vernadski<u>y</u>i. – Simferopol, 2011. – 20 p.

10. Protopopova V.O. Retail turnover of enterprise: management mechanism. / V.O. Protopopova, N.V. Stasiuk. – Donetsk: EP Kupriyianov V.S., 2011. – 225 p.

11. Sagalakova N.O. Economic diagnostics of mercantile business' work: <u>Autor's abstract of the</u> Manuscript. T<u>thesis for a candidate degree in economics</u> obtaining the scientific degree of candidate of economical sciences in <u>:</u> specialty 08.07.05 / N.O. Sagalakova; Kyiv National University of Trade and Economics. – Kyiv, 2006. – 20 p.

12. Kuzmina N.V. Essence and place of economic diagnostics in the enterprise management process. / N.V. Kuzmina. //Economics and Management. – 2009. – №2-3. – Pp. 58-61.

13. Kuzmin O.Ye. Diagnostics in <u>the</u> system of process-structure<u>d</u> management. / O.Ye. Kuzmin, O.H. Melnyk, L.V. Ivanets. // <u>Bulletin</u> Herald of the <u>Lviv Polytechnic</u> National University «Lviv Polytechnic». – 2011. – №714. – Pp.10-14.