

УДК 330.16:574:328.185:51  
URL: <http://hdl.handle.net/11435/2190>

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## IDENTIFICATION OF RISK OF CORRUPTION IN THE CONTEXT OF THE DEVELOPMENT OF THE CONCEPT OF ENVIRONMENTAL NANOECONOMICS

**Objective:** to develop a methodology for identifying the types and subtypes of economic activities at risk of environmental corruption in Russia.

**Methods of research:** the typology of the interaction of meso- and nanoeconomic systems in the context of environmental risk of corruption on the basis of a comparison of the results of correlation and regression analysis of the influence the net financial result of activity of organizations and average monthly nominal accrued wages of employees of organizations on the volume of emissions of pollutants from stationary sources in terms of types and subtypes of economic activity in Russia.

**Research results:** the approach to the organization of countering corruption in the context of the author's concept of the ecological nanoeconomics; developed a method of economic and mathematical analysis of environmental risk of corruption; justified composition of the array of statistical indicators to empirically underpin the author's approach towards the fight against environmental corruption; identified types and subtypes of economic activity, the environmental risk of corruption in Russia; the perspective development of the author's approaches to corruption prevention in Russia and other countries of the world.

**Scientific novelty:** the notion of «nanoeconomics» was first introduced to the scientific and deterministic definition of «environmental nanoeconomics», demonstrated the introduction of the following concepts – «nanoeconomics of enterprise», «nanoeconomics project», «nanoeconomics of the region», «nanoeconomics of the country»; it defines the essence of corruption in the context of dialectics of interrelation of interests of nanoeconomics with the interests of micro-, meso-, macro- and megaeconomics; the developed approach on the application of economic-mathematical methods for the early diagnosis of environmental corruption.

**Practical value:** approach to application of economic-mathematical methods for the early diagnosis of environmental corruption it is advisable to use within pedagogical, research and analysis, and to develop guidelines for diagnosing the risk of corruption; the approbation of the author's methodology of identification of types and subtypes of economic activity, the environmental risk of corruption in Russia, will allow to improve the quality of anti-corruption measures in the implementation of environmental policy of Russia and other countries of the world.

**Key words:** nanoeconomics environmental; environmental corruption; diagnosis of corruption; economic and mathematical analysis.

### Introduction

Corruption in modern conditions is the object of interdisciplinary research. It is considered that a significant part of the global initiative in the study of the mechanism of neutralization of destructive influence of corruption, and naturally belongs to the representatives of law and political Sciences. However, the participation of economists in academic discussion about the nature of corruption and the mechanisms to counter it is objectively necessary. If corruption is primarily the abuse of public (or public – ed. author) office for personal gain [1], the obvious economic motivation of participants of corruption relations.

The author proposes to determine corruption in the context of the theory of nanoeconomics as a relatively new attitudes in the world of science regarding the develop-

ment of economic systems. The term «nanoeconomics» was introduced by K. Arrow in 1987 in the article «Reflections on the Essays» in order to study the economic behavior of individual economic agents in market and non-market conditions [2].

In the first Russian economic thought research in the field of nanoeconomics «as the economy of physical persons» appeared in 1996 and owned by G. B. Kleiner [3].

Theory of nanoeconomics individual natural person as an employee under an employment contract pursues economic interests that interact with the economic interests of the project proponent, the head of the company or other entity (microeconomics), region or type of economic activity (meso-) and country (macroeconomics), world (megaeconomics). The above interaction has a wide range of forms, from mutu-

ally beneficial convergence to the full confrontation. A good example is the behavior of the civil servant or public figure, whose economic interests are encouraged to cause harm to the interests of the state and society. Is this not corruption?

In turn, proposed to clarify the term «nanoeconomics» as follows: it system implementation and public relations on the satisfaction of material needs of the individual person. Fair use the following definitions: «nanoeconomics of enterprise», «nanoeconomics project», «nanoeconomics of the region», «nanoeconomics of the country», etc. Indeed, in the context of the development of the theory of nanoeconomics is of scientific interest does not benefit individuals as such, and the integration of economic interests of an individual in the hierarchy of the benefices of larger economic systems. In particular, the nanoeconomics of the country – a system implementation and public relations on the satisfaction of material needs of the individual person-resident of the country.

Among the acute problems of economic development of countries especially urgent is the problem of greening mega-, macro-, meso - and microeconomic systems. It is obvious that the study of the process of internal resistance to the efforts of the employee of the company or of the government for the greening of production, marketing, Finance and other aspects of economic activity is one of the tasks of the theory of nanoeconomics. As a consequence, in the context of the theory of nanoeconomics first proposed to introduce the term «environmental nanoeconomics» is a system implementation and public relations over the satisfaction of material needs of individuals with regard to the requirements of the continuous conservation of biological diversity.

Naturally there that the study of the species composition of corruption author drew attention to the environmental corruption. The study of the influence of corruption on environmental policy of the countries of the world devoted a number of papers [4–8]: R. Lopez, S. Mitra (2000), H. Welsch (2004), L. Pellegrini (2011), M. A. Cole (2007), S. Morse (2006). A number of scientists examine the effect that security of the country natural resources level of corruption [9–17]: S. Bhattacharyya, R. Hodler (2010), I. Kolstad, T. Sjoreide (2009), I. Kolstad, A. Wiig (2009), P. Robbins (2000), C. N. Brunnschweiler (2008), R. M. Auty (2001), J. Isham, M. Woolcock, L. Pritchett, G. Busby (2005), C. A. Leite, J. Weidmann (1999), C. S. Norman (2009).

First the author proposed to empirically identify the environmental risks of corruption on the basis of economic-mathematical analysis of the interrelation between nano- and mesoeconomic systems. The author's approach can also be used, firstly, to identify other types of corruption, secondly, for recognition of the environmental risk

of corruption based on the analysis of interaction between nano-, micro-, macro- and megaeconomic systems. Principles of reception of economic and mathematical analysis were previously tested by the author to substantiate the necessity of ecologization of the national economy [18].

The essence of the author's approach to early warning of environmental corruption is as follows. Causing damage to the environment on the background, on the one hand, to improve the financial status of a homogeneous group of enterprises, representing types and subtypes of economic activity according to All-Russian Classifier of Types of Economic Activity (the analogue of the NACE), on the other hand, the deterioration of material welfare of employees of the above enterprises, there is one option in the situation when one of the parties is interested in the operational notice state nature-protection agencies and public organizations on environmental offences. Different is the situation when environmental damage occurs on the background of improving financial state of the above-mentioned groups of enterprises, and material welfare of employees of these companies are either improving, or weakly associated with environmental risk. This situation is one of variants of formation of ecological corruption.

Thus, the objective of the article is development a methodology for identifying the types and subtypes of economic activities at risk of environmental corruption in Russia. The research used the following method: the typology of the interaction of meso- and nanoeconomic systems in the context of environmental risk of corruption on the basis of a comparison of the results of stochastic analysis of the influence of the values of indicators characterizing the financial condition of the organizations and material welfare of employees of the above organizations, on the value of indicators characterizing the damage to the environment in terms of types and subtypes of economic activity in Russia. The need for research due to the lack of guidelines regarding the organization of the economic-mathematical analysis of environmental risk of corruption as in Russia and other countries of the world.

### **The results of the study**

In order to empirically underpin the author's approach towards the fight against corruption in the context of the development of the concept of environmental nanoeconomics was formed following the initial database. To characterize the financial condition of mesoeconomic systems was used the indicator of net financial result (profit minus loss) of organizations' activities (in actual prices; million rubles) for the types and subtypes of economic activities that cause environmental damage in the form of emissions of

pollutants from stationary sources (table 1). These include the following 16 types and subtypes of economic activity:

- 1) agriculture, hunting and forestry;
- 2) mining;
- 3) mining and quarrying of energy minerals;
- 4) the extraction of minerals, except fuel and energy;
- 5) manufacturing;
- 6) manufacture of food products, beverages and tobacco;
- 7) processing of wood and manufacture of wood products;
- 8) pulp and paper manufacture; publishing and poly-graphic activity;
- 9) the production of coke and petroleum products;
- 10) chemical production;
- 11) manufacture of other non-metallic mineral products;
- 12) metallurgical production and finished metal products;
- 13) production of vehicles and equipment;
- 14) production and distribution of electricity, gas and water;

15) transport and communications;

16) other community, social and personal services.

The symbols in the table: AGR – agriculture, hunting and forestry; MNG - mining; OIL – mining and quarrying of energy minerals; EXT – mineral resources extraction except fuel and energy; MAN – manufacturing; FOO – manufacture of food products, beverages and tobacco; WOO – processing of wood and manufacture of wood products; PAP – pulp and paper production; publishing and printing; COX – manufacture of coke and petroleum products; CHM – chemicals; MIN – manufacture of other non-metallic mineral products; MET – metallurgical production and production of finished metal products; VEH – production of vehicles and equipment; ENE – production and distribution of electricity, gas and water; TRA – transport and communication; SOC – other community, social and personal services.

For the characterization of the material welfare of the nanoeconomic systems was used the indicator of average monthly nominal accrued wages of employees of organizations in the Russian Federation (rubles) on the above types and subtypes of economic activity (table 2).

Table 1

**Dynamics of the net financial result (profit minus loss) of the activities of organizations by kinds of economic activity (in actual prices; million rubles) in 2005–2013\***

The type and subtype of economic activity	Year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
AGR	27 524	47 303	95 149	82 398	56 274	61 050	94 809	108 931	51 637
MNG	705 254	1 213 354	946 612	849 670	906 740	1 297 897	1 811 226	1 691 234	1 558 058
OIL	599 280	1 088 114	810 880	708 061	821 329	1 068 540	1 442 925	1 364 327	1 331 872
EXT	105 974	125 240	135 732	141 609	85 411	229 357	368 301	326 907	226 186
MAN	955 231	1 475 104	1 828 734	1 383 833	1 092 411	1 690 735	2 013 313	2 226 325	1 475 504
FOO	64 181	83 453	102 025	101 465	151 665	162 649	114 126	189 170	184 830
WOO	3 017	2 686	7 964	-11 151	-12 311	2 041	-6 911	-4 054	2 880
PAP	20 637	24 277	27 412	12 592	18 313	34 710	36 176	39 250	22 766
COX	335 959	466 583	476 848	557 951	693 722	808 791	1 023 539	1 014 725	673 707
CHM	71 248	87 839	125 299	220 433	55 541	163 963	267 771	279 651	145 871
MIN	28 809	85 927	147 327	91 426	7 607	29 466	55 847	88 246	45 068
MET	337 248	561 733	718 663	312 778	206 802	351 317	289 240	284 493	147 995
VEH	15 433	38 300	63 995	-40 690	-110 737	-6 282	63 559	97 196	61 394
ENE	68 826	96 819	142 610	140 674	129 308	343 584	99 860	91 713	76 603
TRA	314 766	409 520	648 074	530 559	497 185	669 712	730 872	878 273	754 210
SOC	26 099	37 674	47 252	44 634	20 950	27 165	24 504	24 565	27 711

\* Source: compiled by the author according to the Federal service of state statistics of Russia<sup>1</sup>.

<sup>1</sup> URL: [http://www.gks.ru/bgd/regl/b14\\_13/IssWWW.exe/Stg/d04/23-37.htm](http://www.gks.ru/bgd/regl/b14_13/IssWWW.exe/Stg/d04/23-37.htm) (accessed: 29.10.15); [http://www.gks.ru/bgd/regl/b10\\_13/IssWWW.exe/Stg/d5/22-53.htm](http://www.gks.ru/bgd/regl/b10_13/IssWWW.exe/Stg/d5/22-53.htm) (accessed: 29.10.15).

Table 2  
Dynamics of average monthly nominal accrued wages of employees of organizations in the Russian Federation (rubles), by type of economic activity in 2005–2013\*

The type and subtype of economic activity	Year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
AGR	3 646,2	4 568,7	6 143,8	8 474,8	9 619,2	10 668,1	12 464	14 129,4	15 724
MNG	19 726,9	23 145,2	28 107,5	33 206,1	35 363,4	39 895	45 132	50 400,6	54 161,2
OIL	23 455,9	27 614,5	33 275,5	39 051,3	41 568,3	46 271,2	51 587,9	57 209,7	61 084,1
EXT	13 176	15 363,7	19 092,7	22 937,4	24 064,1	28 305,8	33 580,1	38 267,3	41 754,4
MAN	8 420,9	10 198,5	12 878,7	16 049,9	16 583,1	19 078	21 780,8	24 511,7	27 044,5
FOO	7 303,8	8 806,7	11 069,2	13 930,4	15 653,1	17 316,9	19 094	21 104,8	23 326,9
WOO	5 895,4	6 950,4	8 815,6	11 301,1	10 947,2	12 720,4	13 941,9	15 248,3	16 949,7
PAP	9 418,6	10 923,6	13 792	17 631,7	17 707,1	20 104,3	23 710,2	26 311,6	28 504,9
COX	19 397,1	22 319,6	28 565	34 912,5	37 963,7	41 563,4	48 462,6	59 195	64 760,1
CHM	9 928,3	11 599,3	14 615,9	18 219,9	19 428,7	22 228,7	25 582,7	28 900,5	32 513,5
MIN	7 921,8	9 983,8	13 193,3	16 371,8	16 053,7	18 117,5	20 518	23 180,4	25 458,3
MET	10 260,7	12 001,5	14 990,7	18 171,1	17 946,3	21 152,1	23 887,1	26 564,2	28 519,8
VEH	9 377,4	11 431,2	14 013,6	17 330,9	17 367,8	20 766,4	24 503,1	27 659,5	30 724,4
ENE	10 637,3	12 827,5	15 587,3	19 057,4	21 554,2	24 156,4	26 965,5	29 437,1	32 230,5
TRA	11 351,1	13 389,9	16 452,3	20 760,8	22 400,5	25 589,9	28 608,5	31 444,1	34 575,7
SOC	6 291	7 996,4	10 392,2	13 538,6	15 070	16 371,4	18 200,3	20 984,5	24 739,9

\* Source: compiled by the author according to the Federal service of state statistics of Russia<sup>2</sup>.

To characterize environmental damage was used to sources (thousand tons) in terms of types and subtypes the volume of emissions of pollutants from stationary of economic activity (table 3).

Table 3  
Dynamics of volume of emissions of pollutants from stationary sources (thousand tons) by type of economic activity in 2005–2013\*

The type and subtype of economic activity	Year								
	2005	2006	2007	2008	2009	2010	2011	2012	2013
AGR	134,1	129,3	118,2	124,8	127,5	136,6	141,1	162,5	164,7
MNG	6 148,1	6 027,1	6 244,8	5 567,2	5 238,6	5 200,3	5 616,0	6 128,4	5 265,9
OIL	5 629,3	5 509,3	5 737,9	5 092,9	4 867,8	4 817,1	5 216,6	5 707,6	4 840,1
EXT	518,8	517,8	507,0	474,3	370,8	383,2	399,4	420,8	425,8
MAN	7 249,8	7 167,9	7 205,1	6 829,4	6 353,5	6 431,0	6 523,1	6 406,5	6 218,8
FOO	147,0	144,6	146,1	140,2	144,9	138,2	147,1	140,1	140,7
WOO	87,8	84,2	85,5	85,5	78,3	84,2	82,9	86,9	86,3
PAP	172,1	162,2	152,9	148,9	152,5	145,1	129,7	128,5	129,6
COX	840,5	764,4	829,8	816,5	663,2	733,3	742,0	753,1	736,5
CHM	349,1	368,9	374,3	351,3	332,2	334,6	338,2	338,7	335,3
MIN	465,9	497,6	520,8	462,6	403,5	418,6	436,7	435,0	425,0
MET	4 816,2	4 787,9	4 751,4	4 496,3	4 303,8	4 289,2	4 365,4	4 262,2	4 114,6
VEH	114,3	116,4	108,3	104,4	82,5	93,1	86,0	89,9	85,8
ENE	3 982,6	4 352,9	4 206,0	4 462,2	4 140,7	4 327,2	4 071,2	4 164,4	3 868,7
TRA	2 085,3	2 150,2	2 211,1	2 475,2	2 605,9	2 426,4	2 248,0	2 107,3	2 219,9
SOC	61,9	59,1	55,2	67,9	89,9	108,0	166,1	232,0	263,0

\* Source: compiled by the author according to the Federal service of state statistics of Russia<sup>3</sup>. The totality of the above indicators included in the scorecard that is annually considered by the Federal service of state statistics of Russia. For the purposes of analysis used the time period from 2005 to 2013 inclusively: data for 2014 is not used due to the lack of published values of the indicator net financial result (profit minus loss) of organizations. In view of the stochastic interrelation, firstly, the net financial result (profit minus loss) of organizations' activities (in actual prices; million rubles) and the volume of emissions of pollutants from stationary sources (thousand tons); and secondly, the average monthly nominal accrued wages of employees of organizations in the Russian Federation (rubles) and the volume of emissions of pollutants from stationary sources (thousand tons), was used correlation and regression method. To clarify the results of correlation and regression analysis was used the method of «emissions» («outliers») in order to prevent accidental inclusion in the source data or noise.

<sup>2</sup> URL: [http://www.gks.ru/bgd/regl/b14\\_13/IssWWW.exe/Stg/d01/06-09.htm](http://www.gks.ru/bgd/regl/b14_13/IssWWW.exe/Stg/d01/06-09.htm) (accessed: 29.10.15); [http://www.gks.ru/bgd/regl/b10\\_13/IssWWW.exe/Stg/d1/06-09.htm](http://www.gks.ru/bgd/regl/b10_13/IssWWW.exe/Stg/d1/06-09.htm) (accessed: 29.10.15).

<sup>3</sup> URL: [http://www.gks.ru/bgd/regl/b14\\_13/IssWWW.exe/Stg/d01/03-14.htm](http://www.gks.ru/bgd/regl/b14_13/IssWWW.exe/Stg/d01/03-14.htm) (accessed: 29.10.15); [http://www.gks.ru/bgd/regl/b10\\_13/IssWWW.exe/Stg/d1/03-14.htm](http://www.gks.ru/bgd/regl/b10_13/IssWWW.exe/Stg/d1/03-14.htm) (accessed: 29.10.15).

To diagnose environmental risk of corruption was schematically presented the author's technique of typology of the interaction of meso- and nanoeconomic systems (fig. 1).

square #1 $R1 < 0,6; R2 < 0,6$	square #2 $R1 < 0,6; R2 > 0,6;$ $r2 > 0$	square #3 $R1 < 0,6; R2 > 0,6;$ $r2 < 0$
square #4 $R1 > 0,6; R2 < 0,6;$ $r1 > 0$	square #5 $R1 > 0,6; R2 > 0,6;$ $r1 > 0, r2 > 0$	square #6 $R1 > 0,6; R2 > 0,6;$ $r1 > 0; r2 < 0$
square #7 $R1 > 0,6; R2 < 0,6;$ $r1 < 0$	square #8 $R1 > 0,6; R2 > 0,6;$ $r1 < 0; r2 > 0$	square #9 $R1 > 0,6; R2 > 0,6;$ $r1 < 0; r2 < 0$

**Fig. 1. The typology of the interaction of meso- and nanoeconomic systems in the context of environmental risk of corruption (author's method)**

Legend: the coefficients  $r1$  and  $R1$  are the regression coefficients of the pair correlation and the net financial result of activity of organizations and the volume of emissions of pollutants from stationary sources (thousand tons) in terms of some types and subtypes of economic activity (excluding noise, or random inclusion in the original data); the coefficients  $r2$  and  $R2$  the regression coefficients and the pair correlation of the average monthly nominal accrued wages of employees of organizations in the country and the volume of emissions of pollutants from stationary sources (thousand tons) in the context of some types and subtypes of economic activity (excluding noise, or random inclusion in the source data).

Explanations for figure: square #1 – economic interests and enterprises, and its employees are neutral to environmental risks; square #2 – workers are not interested in the greening of enterprises and, as a consequence, there is a risk of environmental corruption; square #3 workers are interested in greening enterprises; square #4 – the company is not interested in greening their economic activities and, as a consequence, there is a risk of environmental corruption; square #5 – workers are not interested in the greening of enterprises and, as a consequence, there is a risk of environmental corruption; square #6 – no high environmental risk of corruption; square #7 – the company is interested in greening not only their economic activity, but in the greening of the larger economic systems; square #8 – the company and its employees are interested in greening not only their economic activity, but in the greening of the larger economic systems; square #9 – workers are not interested

in the greening of enterprise and the enterprise itself, in contrast, is interested in «greening» not only their economic activity, but in the greening of the larger economic systems, therefore there is a risk of sabotage by workers.

### Conclusions

Based on the results of correlation and regression analysis generated the array of source data (table 4) has been identified, the type of interaction between nano- and mesoeconomic systems in the context of environmental risk of corruption (fig. 2).

Table 4

**The interrelation of the net financial result (profit minus loss) of organizations' activities (in actual prices; million rubles), the average monthly nominal accrued wages of employees of organizations in the Russian Federation (rubles) and the volume of emissions of pollutants from stationary sources (thousand tons) in terms of some types and subtypes of economic activity (excluding noise, or random inclusion in the source data) in 2005–2013\***

The type and subtype of economic activity	$R1$ , the proportion of units	$r1$ (<0 or >0)	$R2$ , the proportion of units	$r2$ (<0 or >0)
AGR	0,0129	>0	0,6308	>0
MNG	0,0265	<0	0,5828	<0
OIL	0,0175	<0	0,5841	<0
EXT	0,7009	<0	0,6721	<0
MAN	0,0745	<0	0,7938	<0
FOO	0,6445	<0	0,2871	<0
WOO	0,3191	>0	0,0006	<0
PAP	0,3021	<0	0,9354	<0
COX	0,33	<0	0,2499	<0
CHM	0,0715	<0	0,5784	<0
MIN	0,6471	>0	0,3741	<0
MET	0,8267	>0	0,8438	<0
VEH	0,015	>0	0,6584	<0
ENE	0,2425	>0	0,1188	<0
TRA	0,0069	<0	0,0142	>0
SOC	0,2517	<0	0,842	>0

\* Source: based on results of author's calculations.

square #1 WOO, COX, TRA, ENE	square #2 AGR, SOC	square #3 MNG, OIL, MAN, PAP, VEH, CHM
square #4 MIN	square #5 MET	square #6
square #7 FOO	square #8	square #9 EXT

**Fig. 2. Results typology of the interaction of meso- and nanoeconomic systems in the context of environmental risk of corruption (based on the author's methodology)**

Were identified 4 types and subtypes of economic activity, the environmental risk of corruption during the period:

- 1) agriculture, hunting and forestry;
- 2) manufacture of other non-metallic mineral products;
- 3) metallurgical production and finished metal products;
- 4) other community, social and personal services.

Given the potential of the author's methodology, it is planned modification for the identification of other types of corruption, as well as for recognition of the environmental risk of corruption based on the analysis of interaction between nano-, micro-, macro- and mega economic systems.

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Received 30.10.15

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### Acknowledgements

I Express my gratitude to: doctor of Economics, Professor, member-correspondent of the Russian Academy of Sciences Georgy Borisovich Kleiner for a lecture about the modern conception of the system of Economics which inspired the author to develop the theory of ecological nanoeconomics; the initiators of the V all-Russian scientific-practical conference with international participation «Dialectics of corruption counteraction» for the invitation to participate in the conference, which led to an original approach of the author to test the theory of nanoeconomics for the prevention of certain types of corruption.

**For citation:** Salimov L. N. Identification of risk of corruption in the context of the development of the concept of environmental nanoeconomics // *Actual Problems of Economics and Law*, 2015, no. 4, pp. 9–15.

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### ИДЕНТИФИКАЦИЯ РИСКА КОРРУПЦИИ В КОНТЕКСТЕ РАЗРАБОТКИ КОНЦЕПЦИИ ЭКОЛОГИЧЕСКОЙ НАНОЭКОНОМИКИ

**Цель:** разработать методику идентификации видов и подвидов экономической деятельности, подверженных риску экологической коррупции в России.

**Методы:** типологизация взаимодействия мезо- и наноэкономических систем в контексте риска экологической коррупции на основе сопоставления результатов корреляционно-регрессионного анализа влияния сальдированного финансового результата деятельности организаций и среднемесячной номинальной начисленной заработной платы работников организаций на объем выбросов в атмосферу загрязняющих веществ, отходящих от стационарных источников в разрезе видов и подвидов экономической деятельности в России.

**Результаты:** сформулирован подход к организации противодействия коррупции в контексте разработанной автором концепции экологической наноэкономики; разработан метод экономико-математического анализа риска экологической коррупции; обоснован состав массива статистических показателей для эмпирического обоснования авторского подхода к организации противодействия экологической коррупции; идентифицированы виды и подвиды экономической деятельности, подверженные риску экологической коррупции в России; определены перспективы развития авторских подходов в части профилактики коррупции в России и других странах мира.

**Научная новизна:** уточнено понятие «наноэкономика», впервые введена в научный оборот и детерминирована дефиниция «экологическая наноэкономика»; обосновано введение в научный оборот следующих понятий: «наноэкономика предприятия», «наноэкономика проекта», «наноэкономика региона», «наноэкономика страны»; определена сущность коррупции в контексте диалектики взаимосвязи интересов наноэкономики с интересами микро-, мезо-, макро- и мегаэкономики; разработан подход по применению экономико-математических методов для ранней диагностики экологической коррупции.

**Практическая значимость:** подход по применению экономико-математических методов для ранней диагностики экологической коррупции целесообразно использовать в рамках педагогической, научно-исследовательской и аналитической деятельности, а также для разработки методических указаний по диагностике риска коррупции; апробация авторской методики идентификации видов и подвидов экономической деятельности, подверженных риску экологической коррупции в России, позволит улучшить качество антикоррупционных мероприятий в процессе реализации экологической политики России и других стран мира.

**Ключевые слова:** экологическая наноэкономика; экологическая коррупция; диагностика коррупции; экономико-математический анализ.

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*В редакцию материал поступил 30.10.15*

**Как цитировать статью:** Салимов Л. Н. Identification of risk of corruption in the context of the development of the concept of environmental nanoeconomics // *Актуальные проблемы экономики и права*. 2015. № 4. С. 9–15.

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